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News

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INSIDE DOPE

by GEORGE F. AUBENECK

Story of the Week
Exposition Echoes
Republicans Win!
Safety First
Various Degrees of Sin
Define Your Terms
Another Meanest Man
Missing Ingredient
No Volunteers, Please

Story of the Week

This being the peak of the gridiron season, perhaps it would be appropriate to tell the best football story we've heard this year.

Harry Stuhldreher, now head coach at the University of Wisconsin, will always be remembered as the brainy quarterback of Notre Dame's finest backfield, the immortal "Four Horsemen" (Stuhldreher, Crowley, Miller, and Layden). Not long ago Stuhldreher was fanning the breeze with a group of sports enthusiasts. One of the latter recalled that Knute Rockne had devised an unusual "reverse" play.

On most "reverse" plays, three backs plough into the right side of the line, while a fast wingback scoots around the left end, behind the two guards who pull out of the line to block for him. Rockne, however, had a new twist. The center pulled out of the line also, on this play.

"My," observed one fan, "that must have left an enormous hole in the center of the line. Who was supposed to plug it?"

"The quarterback," replied Stuhldreher.

"Did the play work?"

"How should I know?" grinned Stuhldreher. "I'm no dummy. I never called it."

Exposition Echoes

On one particular night, the All-Industry Exposition at Cleveland was opened to the public. Toward the end of that hectic evening, a tired little housewife minned up to the News booth, and looked over the display.

Picking up a copy of the 1946 REFRIGERATION & AIR CONDITIONING DIRECTORY, she shyly asked our Gertrude Livingstone: "Are these for . . . people?"

Best story we heard at the Exposition was told by Ted Sills, who administers a public relations program for REMA. This yarn concerns three partners by the names of O'Connell, O'Flaherty, and Dugan.

A salesman called on this outfit, and asked to see O'Connell.

"Sorry," said the receptionist, "but Mr. O'Connell is out of town."

"Mr. O'Flaherty, then."

"He's out of town, also."

"Mr. Dugan?"

"Sorry, but Mr. Dugan is tied up now."

A week later the salesman returned. The receptionist gave him the same routine: O'Connell and O'Flaherty were out of town, Dugan was tied up.

Two days later the salesman called back, and again it was the same story.

"Listen, sister," he complained, "I'm getting tired of this run-around. I'll admit that Mr. O'Connell and Mr. O'Flaherty might be out of town all this time, but Mr. Dugan certainly can't be tied up every time I come."

"Oh, haven't you heard?" asked the receptionist. "Whenever O'Connell and O'Flaherty leave town, they tie up Dugan."

Republicans Win!

After reading the gratifying election results, it's difficult to be mad
(Concluded on Page 6, Column 3)

Conservation Still Byword

Industrial Leaders Warned Material
Shortages Won't Improve Much In 1947

By Roy Denial

DETROIT — Materials shortages may be bad now, but don't look for them to improve too much in 1947.

That, in effect, is the answer Arthur R. Maupin gave to the pressing current question "Where are the materials?" In an address before the Detroit District of the American Society for Testing Materials last week, Mr. Maupin, chief of the Tin section of the Civilian Production Administration, painted a none-too-bright picture for the assembled group of men representing local producers and consumers of industrial materials.

As for iron and steel, where heaviest demand (aside from housing) occurs in refrigerator, washing machine, and automobile manufacture, he could see naught but "a continuation of a tight situation . . . particularly in sheet steel." Production of sheet and strip for 1946 would probably reach 14,100,000 tons, Mr. Maupin predicted, barely 400,000 tons over the 1945 figure.

Regarding galvanized sheet: "... the loss of production during the coal and steel strikes and the shortage of Prime Western zinc has created a heavy strain on galvanized sheet requirements," he declared. His observation from an extensive country-wide tour, had convinced him that "there will still be a shortage of galvanized sheet for many months to come."

"As far as we can see, the present shortage of light gauge sheet and strip of all types will continue . . .

well into 1947 . . . even though new facilities are being . . . put into operation."

Pig Iron, which Mr. Maupin considers "basic to our whole subject" is so short that some "companies are operating far below the minimum economic level of production." Although, Mr. Maupin pointed out that August, 1946 had been a peak month in the output of pig iron, no relief of the shortage could be expected unless scrap supplies increase or furnaces (not now being utilized) are put in operation.

"The scrap stockpiles at mills and foundries are precariously low," Mr. Maupin continued. "In fact, they have dropped so alarmingly that inventories threaten to vanish soon unless drastic action is taken to stimulate the inflow of scrap." As a means of aiding mills and foundries, which "now live on a hand-to-mouth basis," Mr. Maupin outlined a three point scrap collection program now being promoted principally by CPA. It provides for a "thorough scrap clean-up of all plants and properties . . . and the scrapping of 'all obsolete and unusable equipment. . . ."

Switching to a discussion of copper supplies, Mr. Maupin declared that "large quantities" of copper base scrap are being held by "many dealers and smelters, as well as speculators . . . in anticipation of a price rise." But he felt that the copper base scrap situation was such that "even if the present supply of scrap
(Concluded on Page 4, Column 2)

Nance Hotpoint VP
Plan \$17 Million
Expansion Program

CHICAGO — James J. Nance has been elected executive vice president and a director of the Edison General Electric (Hotpoint) Appliance Co. Simultaneously, details of a major program of expansion by the company, manufacturer of Hotpoint electrical appliances, were announced by Ray W. Turnbull, president.

Mr. Turnbull pointed out that the election of Mr. Nance, a veteran in the field of major electrical appliances, was an administrative step in keeping with a program of physical expansion involving \$17,000,000 in working capital and manufacturing facilities.

Expansion of the company's production facilities, Mr. Turnbull said, will more than double employment of the prewar period. Three of the company's complete lines of major appliances, electric ranges, water heaters, and dishwashers, are manufactured in Chicago. Mr. Turnbull pointed out that a combination of factors explained the new importance of these appliances in the period ahead.

"Besides the pent-up demand for major appliances of all types," Mr. Turnbull said, "it is significant that in the postwar period more than 90% of the communities throughout the United States have favorable electric service rates for the use of electric ranges and water heaters."

"Production capacity for ranges and water heaters will be multiplied from two and one half to three times," Mr. Turnbull said. While present production is equal to the prewar annual rate, he pointed out that lack of steel is preventing current production from going even higher. Present indications are that 1947 will see a partial achievement of the expanded production goals and that the program will progress still further in 1948.

Commenting on the distribution of
(Concluded on Page 4, Column 1)

H. A. Valencourt Named
New Eastern Regional
Head for Kelvinator

DETROIT — Appointment of H. A. Valencourt as eastern regional manager of the Kelvinator Division of Nash-Kelvinator Corp. was announced last week by Charles T. Lawson, vice president in charge of sales.

Succeeding Steel R. Sellers, who died last August, Mr. Valencourt joined Kelvinator as zone sales manager in Chicago in 1940. He has been manager of Kelvinator's Pittsburgh zone since 1943.

Mr. Valencourt, a veteran of World War I, entered the appliance business after several years as a retail
(Concluded on Page 4, Column 5)

'Hot' Suspect In the 'Freon' Mystery

Kinetic Puts the 'Finger' on That Old
Reprobate 'Mr. Missing Cylinder'

WILMINGTON, Del. — The chief suspect in that great mystery drama "Freon," "Freon," Who's Got the 'Freon?," is that elusive character Mr. Missing Cylinder, declare officials of Kinetic Chemicals, Inc. here, producer of the refrigerant.

As explained in Chapter 1 of this mystery drama—published in the Oct. 21 issue of the NEWS—the elements of the mystery are relatively simple. Certain segments of the industry have complained that there simply isn't enough "Freon-12" being made available to contractors and service firms in the field, Kinetic, the producer, says that there should be enough, but that the failure to get cylinders back retards production.

Putting the finger squarely on Mr. Missing Cylinder, W. W. Rhodes, Kinetic sales director, says:

"The rate of return of empty cylinders has been falling off again and this could mean another period of shortages."

Appliance Price Boosts Likely In
View of Increased Material CostsWage Demands Seen
Forcing Increase
In Service Charges

DETROIT — Prices charged for refrigerator and appliance servicing in this area "have not gone up to any great extent that I can see even with the ceilings off," declared Raymond M. Shock, executive secretary of Detroit service and contractors associations. "The standard rate of \$3 per call is still prevailing."

"As far as I know, only the shops which are facing demands for higher wages from union employees are planning to increase their prices. Negotiations between the contractors and the union have not started yet, so the contractors do not know what the wage demands and their prices will be."

A Detroit contractor points out that no official statement on decontrol has been received yet so he is "sitting tight," but he fears that his prices will have to be increased. His labor costs have already jumped from \$1.10 to \$1.30 an hour, and he expects higher demands from the union.

Bynum, Gazelle and
Spriggs Promoted
By Carrier Corp.

SYRACUSE, N. Y. — O. W. Bynum becomes manager of direct sales; John A. Gazelle, manager of distributor-dealer sales, and Carl U. Spriggs, assistant general sales manager, in a series of promotions announced by Arthur P. Shanklin, vice president and general sales manager of Carrier Corp. All will have their headquarters here.

These appointments have been made in anticipation of expanded sales as increased availability of materials and parts makes it possible for Carrier to step up manufacturing activities to meet the huge demands for air conditioning and refrigeration equipment, Mr. Shanklin stated.

As manager of direct sales, Mr. Bynum will be in charge of the sale of Carrier's larger air conditioning, refrigeration, and industrial heating
(Concluded on Back Page, Column 3)

Decontrol Finds Producers
Trying To Hold Line
Wherever Possible

DETROIT — With the ending of virtually all OPA controls it appears likely that there may be some increases in prices of most major appliances, but the most important reaction will probably be a great improvement in the supply situation, according to leading appliance manufacturers.

"Trade spokesmen said they expected advances of 10 to 20% in prices of some motor-driven electrical appliances, and lesser increases in small appliances such as toasters," stated one published comment.

Another result may be an earlier return to the introduction of new models on an annual basis. One electric range producer, for example, had planned to bring out a new 1947 model late next year, but he now believes they'll have to scrap this plan and bring out a model much sooner.

Consumer durable goods prices can hardly stand still in face of announced increases in materials.

Domestic copper prices have been boosted 3½ cents a pound. The price of grade "A" tin has been advanced 18 cents a pound to a level of 70 cents a pound.

While steel officials said they were not planning to increase prices now, they did qualify their statements by saying that increases would come "if labor and material costs got out of hand." Some observers thought that the increase of \$2.50 per ton for steel scrap announced this week might force higher prices soon.

Aluminum prices will probably not be increased as a result of the general decontrol program, although some adjustments may be necessary later on if cost factors change. Aluminum itself has not been under OPA control.

No actual price increases have been announced by appliance manufacturers as yet.

Hotpoint

Hotpoint, however, is withdrawing its present prices and plans to announce new prices shortly.

Frigidaire

Frigidaire officials say they have "no comment" concerning a revised schedule, but C. E. Wilson, president of General Motors Corp., stated that "price increases will be announced later" by the Frigidaire and Delco divisions of G. M.

Admiral

"Admiral refrigerator prices remaining same. No definite decision or changes as of today (Nov. 14). Studying prices from our suppliers." This statement was received by the NEWS from L. H. D. Baker, vice president and manager of Admiral's refrigeration division.

Kelvinator

"Future prices of Kelvinator electrical appliances will depend, as always, upon our labor and material costs and our volume of production," said George W. Mason, president of Nash-Kelvinator Corp. "Our ability to attain volume production is partly dependent upon a free flow of materials and parts. Our main interest is to keep prices as low as possible."

Norge

Howard E. Blood, president of Norge Division, Borg-Warner Corp., declared, "An increased volume of production should become evident in the very near future as a result of the lifting of price controls, and while this may be accompanied by slight increases in prices on some
(Concluded on Back Page, Column 1)



Such refreshingly cool water... So easy to operate... So pleasant to drink from!

Yes—in its brilliant, stainless steel top, handsome bronze-walnut cabinet, recessed ebony base, superb cooling mechanism and other outstanding features, the new OASIS dramatizes the advantages of EBCO's 20 years of pioneering leadership in the electric water cooler industry!

The EBCO Manufacturing Co., 401 West Town Street, Columbus 8, Ohio

29,161 Nebraska Farms Served by Electricity, 16,000 on Waiting List

GRAND ISLAND, Neb.—Nebraska now has 29,161 farm homes connected with rural electric lines, or 37.3% of the total farms, while 45,245 farm premises or 60% of the rural homes will have electricity when electric lines for funds that already have been allocated are built, it was stated by C. A. Sorensen, Lincoln, at the Nebraska-Kansas-Colorado-Wyoming regional meeting of the Rural Electric Cooperative association held here.

Crosley Price Corrected

Retail price of the Crosley SE-947 Shelvador household refrigerator is \$263.95, the company announces. In the NEWS of Oct. 7, the price was given as \$236.75, this figure having appeared in an official government notification of the price increase.

Second Frozen Food Center Opened in Bridgeport, Conn.

BRIDGEPORT, Conn.—Said to be the second store of its type in this city, E. & S. Frozen Food Center was opened recently by Fred Ettinger and Gustave Steiner. The store, located at State and Lee, also carries a complete line of bakery and pastry goods. Frozen foods are dispensed from four Frigid Freeze cases.

Norge Ceilings Issued As Truman Decontrols

DETROIT—One of the last regulations issued by OPA just before President Truman abolished most price controls established single national retail ceilings for four models of household refrigerators manufactured by Norge Division of Borg-Warner Corp.

The Norge ceilings were announced as follows:

Make	Brand	Model	1946 zone*	Retail ceiling prices— first zone*
Borg-Warner Corp.	Norge	M-446		\$158.95†
		CF-746		219.45†
		SFN-746		247.45†
		SFN-946		264.45†

*The first zone includes the 48 states and the District of Columbia.

†A charge of \$2.75 may be added if the refrigerator is sold equipped with a left-hand door. A charge of \$27.50 may be added if the refrigerator is sold equipped with an open type unit.

According to OPA, the amendment established "a retail ceiling price for each model which reflects a markup over the sum of the manufacturer's f.o.b. factory ceiling price for sales of the model to distributors and the average freight cost for shipping the refrigerator from the factory to all points in the United States weighted for the sales experience of the manufacturer, population shifts, and other relevant factors, equal to that previously included in the retail ceiling prices of the same model."

High Cost of Living Reduces Durable Goods Prospects

OMAHA, Neb.—The large savings accounts supposedly held by the average worker is fast disappearing, and by the time the buyer's market arrives, the number of buyers will be greatly reduced, it was declared by Henry Czech, Chicago, in an address before the members of the first annual conference of the Nebraska-Iowa Electrical Council held here early in November. Mr. Czech is district manager for an appliance manufacturing concern.

"Each time the cost of living goes up 10%," Mr. Czech stated, "15,000,000 families are eliminated from the market for durable goods. The cost of living has risen 20% since July and 50% since 1940," he added.

The speaker said that when housing shortage bottlenecks are broken, new homes will be sold fully equipped with the latest electrical appliances, and thus durable goods will be purchased by instalment methods.

Electrical appliances most abundant on the market today, he declared, are table model radios, while the greatest shortage is in the fractional horsepower electric motor field.

Direction 14, PR 33 Helps Builders Get Blower Motors

WASHINGTON, D. C. — Because furnace manufacturers recently have found it necessary in some cases to ship forced warm-air furnaces without blower motors and these furnaces, now installed, need motors to make homes habitable during the coming heating season, the Civilian Production Administration has made provision for channeling small motors into these furnaces. The need applies particularly to a number of homes built under the Veterans' Emergency Housing Program.

Direction 14 to Priorities Regulation 33, now in effect, provides that any owner, occupant, or builder of a housing accommodation who is unable to obtain a blower motor for a forced warm-air furnace which was installed without a motor may certify in writing to his furnace supplier that the housing accommodation is occupied or ready for immediate occupancy, but will not be habitable without a blower motor.

The direction provides that the supplier must treat this certificate as if it were a rated order, and either fill it, if he can, or pass it on through regular trade channels until it is filled.

The wording of the certificate to be used in obtaining a blower motor follows:

The undersigned certifies to the seller and the Civilian Production Administration, subject to the penalties of Section 35a of the United States Criminal Code, that (i) he is the (state whether owner, occupant, or builder) of a housing accommodation located at (give location of housing accommodation) in which a forced warm-air furnace has been installed without a blower motor, (ii) the housing accommodation is occupied or ready for immediate occupancy, but will not be habitable during the heating season without a blower motor, (iii) he has been unable to obtain a motor for the furnace, and (iv) the motor which he gets with the certificate will be installed in and used with the furnace which has been installed without a motor.

(Signature of owner, occupant, or builder)

If the supplier does not have any suitable motors on hand with which to fill the orders, and does not customarily obtain motors from a motor manufacturer for assembly with the forced warm-air furnaces which he sells, he must promptly forward the certificate to the supplier from whom he obtained the blower without the motor, noting on the certificate his own name and address, CPA said.

The certificate must be extended in this manner until the order is filled or it reaches the furnace manufacturer who customarily obtains the motor from a motor manufacturer (or the blower manufacturer, if the furnace manufacturer customarily obtains blowers complete with motors from him), but the order must be filled by that manufacturer under the rules of Direction 14 to PR-33 and the certificate may not be extended by him.

EVERY STAR HAS ITS POINTS

With a choice of five streamlined financing plans, each with its own strong selling points, you can really write your own ticket on the kind you want, and be sure that it will get you the most volume and profit your market can yield.

From experience, we know that you can get more profit on your financed

sales than from cash customers. We know that our credit selection is so sound, it will comb out maximum volume on practically a 100% loss-free basis.

Why don't you call in a Commercial Credit representative and let him help you pick the *one* "star" plan that best fits your particular business?



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Gilmer V-Belts fit. Once they are installed no return trips for re-adjustment are necessary. Gilmer V-Belts fit because cords are normalized to minimize stretch.

And Gilmer V-Belts have all the other important qualities that count. They are ruggedly built for long life. They assure dependable performance. And there are sizes for all needs, for Gilmer V-Belts are made on the largest assortment of V-moulds in the world. Get in touch with your jobber today.

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See Your
ANSUL WHOLESALER



These Ansul refrigerants have a long record for DRYNESS, PURITY and DEPENDABILITY. You will like Ansul's friendly service.

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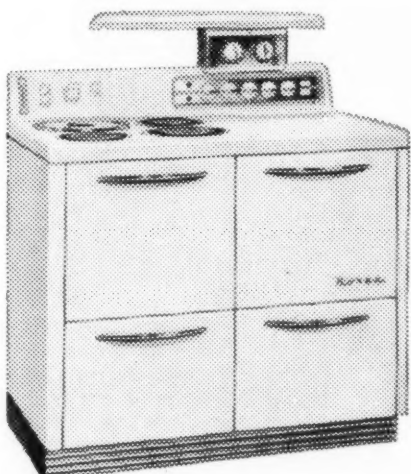
ANSUL CHEMICAL COMPANY
REFRIGERATION DIVISION
MARINETTE, WISCONSIN
Distributors for Kinetic's "Freon-11," "Freon-12," "Freon-21," "Freon-22" and "Freon-113"

BUILT TO BE THE

**GREATEST VALUES
IN THE FIELD!**

The complete line of Norge major appliances—built to be the greatest values in the field—provides Norge dealers with a wide-range profit opportunity. Each product is jam-packed with buy appeals. Each product is built for efficient, lifetime, trouble-free opera-

tion. Widespread public acceptance and powerful, interest-arousing advertising will bring plenty of prospective buyers to Norge retailers for these fine products of experience. . . . "The Best Dealer in Town Sells Norge."



TWO
MODELS

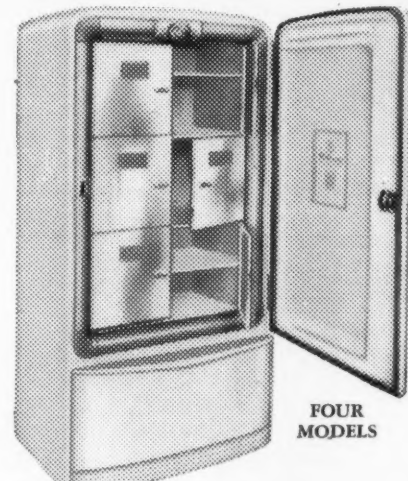
There's thrilling new beauty, efficiency and economy in the new Norge electric ranges . . . engineered and built for matchless cookery.



FIVE
MODELS

New "Rollator"® refrigerators have greater eye and buy appeal, with more frozen-food space, freezer flexibility, upright bottle space and shelf area.

*Trade-mark registered U. S. Patent Office and foreign countries



FOUR
MODELS

The vertical six-foot freezer, together with the chest-type models for home and farm, provides a new source of exciting profit-volume.



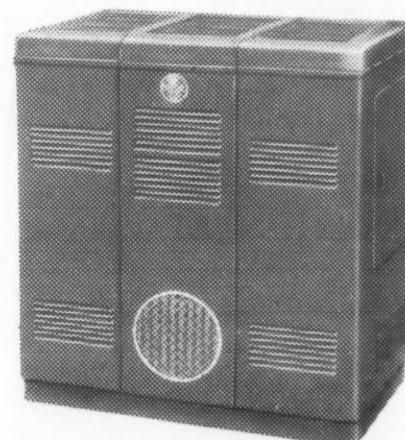
THREE
MODELS

Norge gas ranges combine all the important, advanced features that bring greater efficiency, real beauty and more economy to users.



FOUR
MODELS

The "Ro-ta-tor" washer gives users the exclusive Norge triple-washing action, offers prospects new advantages for happier washings at less cost.



FOUR
MODELS

The finest line of home heaters in Norge history provides real profit opportunity for dealers who promote the wide range of models.

A BORG-WARNER INDUSTRY

Norge is the trade-mark of Norge Division, Borg-Warner Corporation, Detroit 26, Michigan. In Canada: Addison Industries, Ltd., Toronto, Ont.

SEE
NORGE
BEFORE YOU BUY



J. J. NANCE

Hotpoint Names Nance--

(Concluded from Page 1, Column 2) the company's products, Mr. Turnbull said that channels presently used by the company will absorb all output.

Mr. Nance, whose home is in Glencoe, a suburb of Chicago, has had broad experience with several manufacturers of major appliances. Immediately prior to his present appointment, he has been serving on the staff of Charles E. Wilson, president of the General Electric Co.

For many years he was associated with Frigidaire.

Material Shortage--

(Concluded from Page 1, Column 3) throughout the country could be put into motion and not hoarded, the supply might be barely adequate." He saw the U. S. "hampered by the shortage of non-ferrous scrap metals for fully a couple of years."

A similar condition exists in the field of copper itself, Mr. Maupin added, where he forecast the 1947 demand would outstrip supply by some half-million tons.

"The most harmful blows to our copper position were the strikes during the first half of this year," Mr. Maupin declared. He then displayed a chart showing that an output of approximately 200,000 tons were lost during these strikes. "... This copper shortage is not a temporary one, but ... will probably be felt ... in ... brass mill and wire mill products for several years."

As for tin, Mr. Maupin further stated: "We figure that the demand for controlled uses is approximately 70,000 tons for pig tin for this year beginning July 1. On the supply side of the picture, there will be from 40,000 to 50,000 tons available, and the balance must come from the United States Government stockpile." In other words, that means "a continuing deficit that will last for several years."

Little more encouragement could be given for users of zinc. According to Mr. Maupin's figures, the supply for the coming year will leave "a deficit of some 73,000 tons, which occurs almost entirely in the lower grades with the bulk in 'Prime Western.'"

Mr. Maupin foresaw 1947 produc-

ing a similar condition in the supply of lead. Backing up his statements with charts and statistics, he declared that the "contemplated lead supply from all sources will be only two-thirds of our actual requirements. There is no doubt but that severe hardships will be imposed on many industries, and even the most essential items will have to be limited by this overall lead shortage."

"The lead outlook is certainly pessimistic. It constitutes one of our gravest problems, and I see no possibility of obtaining any substantial increase in over-all lead production for a number of years to come."

Principal bright spot in the materials picture at present is rubber, Mr. Maupin averred. In this field although natural rubber will continue in short supply throughout 1947, synthetic rubber production is expected to satisfy this need in many cases. Meanwhile with rubber consumption at its peak, more natural rubber is becoming available for consumers, disclosed Mr. Maupin.

The plastics industry whose increased production and general use Mr. Maupin termed "nothing short of phenomenal," still has considerable ground to cover to satisfy demand. Shortage of this material, Mr. Maupin opined, has seriously curtailed the supply of finished products for the electrical and radio industries, among others. Continued expansion notwithstanding, he said, the output of plastics would "still leave the industry 40% short of its material requirements."

In closing Mr. Maupin said: "It is the responsibility of you men in the design and production branches of industry to effect ... conservation ... measures ... through improved production methods. ..."

Two Named to New Posts In East

H. A. VALENCOURT
Kelvinator's new eastern regional manager.LAURENCE V. CONLIN
He will manage Kelvinator's Pittsburgh zone.

Low Temperature Units, Conditioning Equipment Offered As War Surplus

DETROIT—Forty-eight items of industrial sub-zero refrigeration and air conditioning equipment, in addition to fans and industrial vacuum cleaners will be offered for sale by the Detroit regional office of the War Assets Administration beginning Nov. 27, the WAA has announced.

Sales will be made at the Detroit office according to the following priority schedule:

- World War II veterans, Nov. 27 to Dec. 2
- RFC for small business, Dec. 3 to Dec. 5
- State and Local govt., Dec. 6 to Dec. 10
- Non profit Institutions, Dec. 11 to Dec. 13
- Non priority buyers, Dec. 16 and thereafter.

All of the property will be sold "where is—as is." The merchandise, located in Detroit and its industrial suburbs, is said to be in used—good and used—fair condition.

It will be sold at fixed prices, ranging from 57 cents for an electrical appliance extension cord to \$2,935.10 for an air conditioning system and duct work. Minimum purchasers are set at \$50.

Among the equipment for sale are Kold-Hold low temperature and chill cabinets, Kold-Hold rivet coolers, Deepfreeze chilling units, G-E low temperature storage cabinets, Frontier metal cooling cabinets, Carrier and American Refrigerator Co. air conditioning equipment, Mills, York, and Brunner compressors, and Graybar drinking fountains.

'Freon' Suspect--

(Concluded from Page 1, Column 3) duction level.

"It was hoped that this condition could be averted through the receipt of new containers, but the manufacturers who are contracted with us for containers are behind on their deliveries and there is only one solution to the problem.

"If every segment of the refrigeration industry will search for empty containers and return them now, a shortage such as occurred in June to September, inclusive, of 1946 can be prevented. We only need 12% per month of the cylinders that are in the field to keep 'Freon-12' moving in great volume into distribution channels.

"Even though we are in a period when 'Freon-12' is evidently being accumulated, it ought to be possible to return 36% of the cylinders in the field during the next three months, and if this could happen through the kind cooperation of the industry, there will be no shortage in the year 1947.

"It is difficult for the industry to understand our plight. First, it is a shortage of containers, then we have enough containers but have lost production, then comes the fall of the year when the shortage of 'Freon-12' is over, but the shortage of containers is again becoming a factor. So the whole problem boils down to having containers at the right time in order to maintain production and avert the summer shortage of 'Freon-12.'

Kelvinator Shifts--

(Concluded from Page 1, Column 3) salesman, becoming field representative of a New England appliance distributor in Boston in 1928. Almost all of his long experience in the field, where he has held a number of executive sales positions, successively in Boston, Philadelphia, Chicago, and Pittsburgh.

Mr. Lawson at the same time announced the appointment of Lawrence A. Conlin to succeed Mr. Valencourt as Pittsburgh zone manager.

Mr. Conlin has been household sales manager of the Pittsburgh zone since 1942. He joined Kelvinator in 1939 as district manager in Pittsburgh, and subsequently was Cleveland branch manager and factory regional representative. He entered the appliance field in Pittsburgh in 1936 as a salesman.

35,618 'Freon' Cylinders (50 lbs.) Go on Sale

PHILADELPHIA—"Freon" cylinders—35,618 of them—of 50-lb. capacity size, are being sold by the War Assets Administration here at a price of \$7 each in minimum lots of 15.

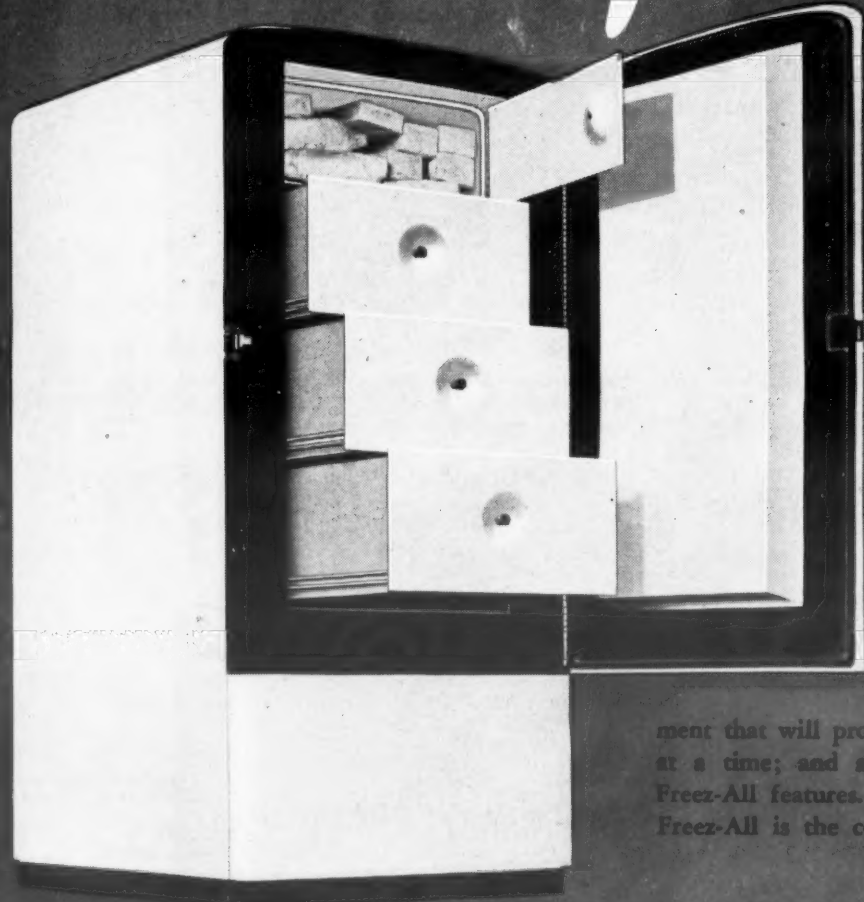
Declared as war surplus, the cylinders were originally used by the U. S. Navy and are claimed to be in fair condition. Kinetic Chemicals, Inc., producer of "Freon," has announced that it doesn't want these cylinders because they are an "in-between size which no one but the Navy likes."

The cylinders are 34½ in. long and 8½ in. in diameter. They come complete with valve and cap under I.C.C. classification 4B-300. Prices quoted by the WAA are f.o.b. Deepwater, N. J.

Before these cylinders can be used, the Navy name will have to be stenciled out, and the cylinders re-tested and re-registered.

The sale opened Nov. 13 and will run until Dec. 3, and is being conducted by the WAA Materials & Supplies Sales Division, Room 823, 437 Chestnut St., Philadelphia 6.

Freez-all... the freezer of the FUTURE Today

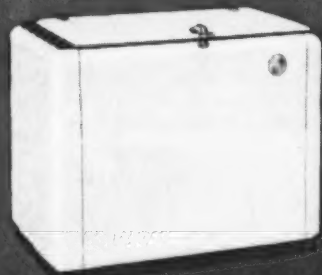


MODEL 80

Beautiful and practical, the Freez-All Model 80 requires a minimum of precious floor space ... yet has a full 8 cu. ft. of easily accessible food storage space.

MODEL 60

6 cu. ft. chest type home freezer. Designed for small families. Constructed to meet the strict, high standards of Freez-All quality.



Freez-All, the original drawer type home food freezer, makes the housewife's dream of future conveniences a reality. Leading the industry in ultra-modern features, Freez-All is the first, practical response to consumer demand for: Food storage drawers that open at the touch of a finger; space-saving upright design of peerless beauty; three spacious storage drawers, for food segregation; sub-zero, sharp freeze compartment that will process large quantities of food at a time; and a host of other top quality Freez-All features. Freez-All is the consumer's dream come true!

Products of
REFRIGERATION DIVISION
DEPT. F-111
PORTABLE ELEVATOR MFG. CO.
Bloomington, Illinois

Freez-all
THE ORIGINAL DRAWER TYPE FREEZER

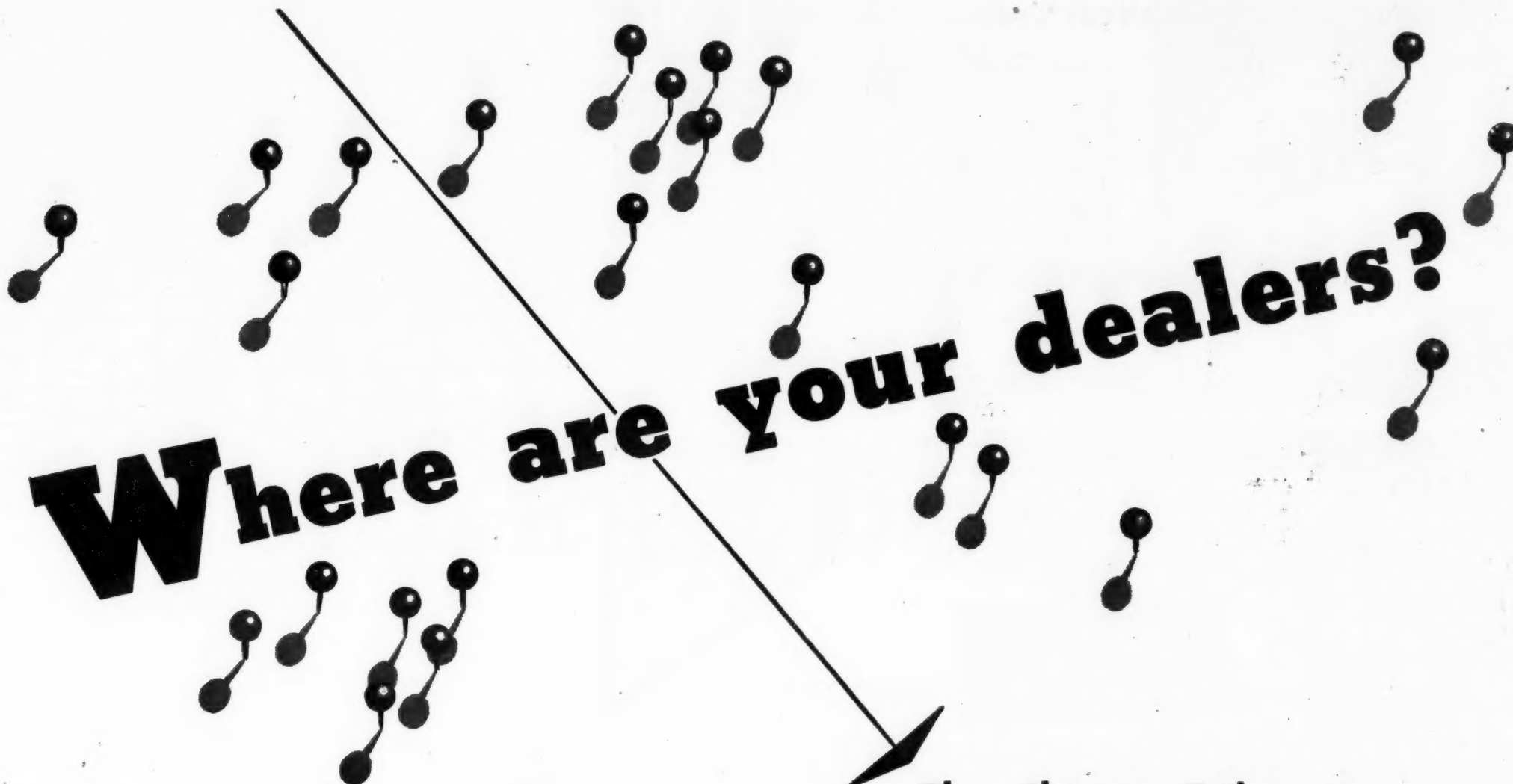
In the West it's
REFRIGERATION SERVICE INC.
Pacific Coast Supply Jobber
since 1928

Your letterhead will bring our latest
catalog—also our House Organ.

"The Liquid Line"
3109 Beverly Blvd.
LOS ANGELES 4, CALIF.

SUPERIOR VALVE & FITTINGS COMPANY
Pittsburgh 26, Pennsylvania

VALVES, FITTINGS &
ACCESSORIES
For All
• Refrigeration
and
• Air Conditioning
Systems



The Chicago Tribune's
DURABLE GOODS STUDY reveals
these pertinent facts about the
GREAT CHICAGO MARKET
and the dealers who serve it—



1 Where to locate dealerships for minimum and for representative distribution of your products.



2 The indicated purchases, item by item, to be made by consumers in each of 21 sales areas.



3 The types of outlets in which these purchases will be made.



4 The kinds of sales policies and cooperation dealers want from their sources.

Now available are two potent tools to help you gain maximum sales in the Great Chicago Market—and at minimum cost. The durable Goods Study among consumers and dealers reveals important facts about home appliances in this market—and the Sales Plan shows you how to put these facts to work for your products.

To gain the information that will help you, we interviewed 2,051 dealers in Chicago and suburbs and in 91 cities in 5 states. They told us their plans for merchandising and selling, for promotion, for modernizing. They told us *how they want to be treated by the manufacturer.*

Equally important to your success in the Great Chicago Market are the interviews we made with 10,850 families in the 5-state area. These families told us of their present appliances, their contemplated purchases, and the type of outlets they expect to shop in. In short, we obtained over two million answers to significant questions about home appliances—answers that will help you get your share of a market so large that it can absorb all or an important part of your production.

To get the benefit of the Durable Goods Study and the Sales Plan simply write your nearest Tribune representative, as shown below.

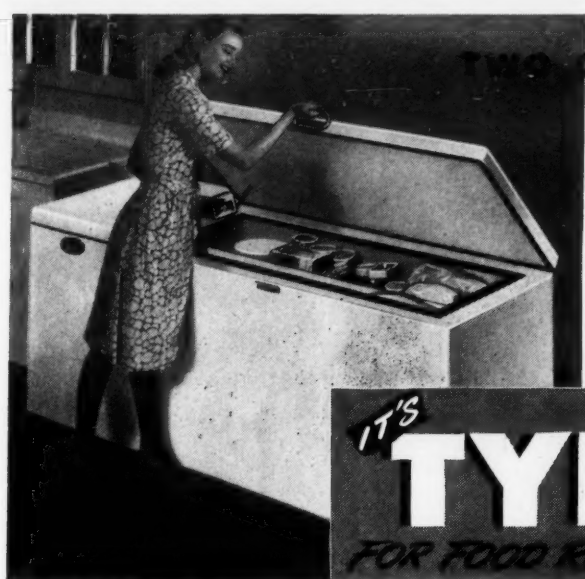


No other medium gives such quick, effective and thorough coverage of the Great Chicago Market as the Chicago Tribune. 63.4% of the \$414,757,552 indicated purchases of home appliances during the first year they are available in this market, will be spent by Tribune-reading families. Tribune rates per line per 100,000 circulation are among the lowest in America.

Chicago Tribune
the World's Greatest Newspaper

September average net paid total circulation:
Daily, over 1,100,000; Sunday, over 1,500,000

H. N. King, Chicago Tribune,
810 Tribune Tower, Chicago 11
E. P. Struhsacker, Chicago Tribune,
220 E. 42nd St., New York City 17
Keene Fitzpatrick, Chicago Tribune,
155 Montgomery St., San Francisco 4
W. E. Bates, Chicago Tribune,
Penobscot Building, Detroit 26



TWO GREAT LINES!

Cash in on the complete Tyler Commercial line plus the fast selling Tyler Harder-Freezer Home Locker line. A winning sales program. National advertising! **SUB-AGENTS** are available. Write the Tyler **AGENT** or Tyler Fixture Corp., Niles, Mich.

IT'S TYLER
FOR FOOD REFRIGERATION

INSIDE DOPE

by **GEORGE F. TAUBENECK**

(Concluded from Page 1, Column 1) at anybody, or serious about anything. So what do you say that we just go on telling stories for awhile?

This, purportedly, is a true one:

A prominent New York advertising executive was recently married for the fourth time. It was the third trip to the altar for his bride. So a waggish associate of the groom addressed this telegram to their honeymoon suite:

"WHAT'S NEW?"

Safety First

Four men walked into a bar. The first man ordered drinks for the quartet. The second followed suit, the third man ordered in turn, and finally the fourth.

This last drink was too much for the fourth man, however, and he passed out, falling to the floor.

The first man again ordered "another round."

"Shall I pour one for your friend on the floor?" asked the bartender, sarcastically.

"Perhaps you'd better not," advised the first man, seriously. "He's driving us home."

Various Degrees of Sin

"Sin," explained the colored parson, "is jest like dogs. They's little dogs, which is jest kind o' mean, and then they's big dogs which is so bad that all you can do wif 'em is shoot 'em."

"Now take the big sin-dog of Greed, and the big sin-dog of Envy, and the big sin-dog of Sex. Those big bad sin-dogs jest hasta be killed. And you can do it, brethren. I know, 'cause I've killed the big bad sin-dog of Envy, and of Greed, and of Sex, too."

"Pahson," interrupted one of his parishioners in the back row, "are you sure that las' dog didn't die a nacheral death?"

Define Your Terms

Two small Catholic boys, while strolling through Central Park one afternoon, met a Protestant clergyman dressed in ministerial black. One of the boys, taking for granted the pastoral garb, doffed his cap and said, "Good afternoon, Father."

The other lad nudged him and whispered: "Quiet, stupid; he ain't no father—he's got a wife and four kids."

Another Meanest Man

A little boy and his Daddy were great pals. One day the father presented his boy with a shiny, red box in which pennies could be saved. The lad was delighted.

After a brief period of time had elapsed, during which the boy had inserted penny after penny into the slot on the top of the red box, his father lifted the box's lid, took out the pennies and counted them.

"That's fine, my little man," he told the boy, giving him an approving pat on the shoulder. "I'll give you a dime for each of these ten pennies. Now you can start saving dimes in this bigger purple box."

So the boy continued to save coins enthusiastically.

A few weeks later, the boy's father showed him a big, black box.

"Now," said the father, "the time has come for you to save quarters. You can deposit them in the slot in this nice, black box."

With visions of a thriving bank account, the lad faithfully continued

to feed quarters into the mouth of the black box.

Some years later, the boy discovered that the black box was the gas-meter!

Missing Ingredient

An inventor of those forever-popular household gadgets had been laboring for several days on the latest of these aids to humanity. Upon perfecting his novelty, he proudly summoned a member of his staff, and invited him to look with awe upon the new device which he had assembled.

"This is sure to sell like wildfire," he joyfully informed his contemporary, waving the Rube Goldberg device under his nose. "It's a combination pencil-sharpener, egg-beater, whisk-broom, potato peeler, letter-opener, calendar, and thermometer. Then, with a flick of the wrist, it turns around, and there is a clock with a glue-dispenser on top. Now, friend, what do you think of that?" he asked triumphantly.

His companion frowned and regarded the invention contemplatively for several minutes. Finally his face lit up, and he exclaimed:

"It just now occurred to me what's lacking. No radio."

No Volunteers, Please

Two policemen driving about in a scout car, were alerted by a summons on their two-way radio:

"Calling car 24. Car 24 proceed immediately to Whoopee Theater. Strip-tease queen is walking around without any clothes. That is all."

As the two officers in car 24 swung around to hasten to the burlesque theater, another call came through on the radio:

"All other cars remain on your beats. That is all."

For DEPENDABLE Refrigerants

"EXTRA DRY ESOTOO"
(Liquid Sulfur Dioxide)

"V-METH-L"
(Methyl Chloride)

Distributors of
"FREON" REFRIGERANTS
11, 12, 21, 22, 113

VIRGINIA
SMELTING COMPANY
NEW YORK • BOSTON • DETROIT

"Advanced" Refrigeration Compressor

The Compressor for any 1/2 HP job!

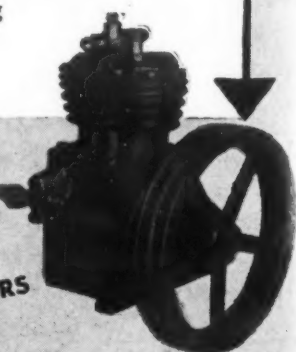
On any refrigeration or freezing job that a 1/2 HP compressor can handle, you can use the "ADVANCED" Refrigeration Compressor.

We designed it, we make it, we stand back of it. You can get specifications and other information by writing or phoning to address below, Dept. A-4.

Advanced Aircraft, Inc.
Compressor Division
Cornwells Heights, Pennsylvania
Cornwells 0564

AVAILABLE TO MANUFACTURERS AND JOBBERS

THE COMPRESSOR YOU CAN DEPEND ON



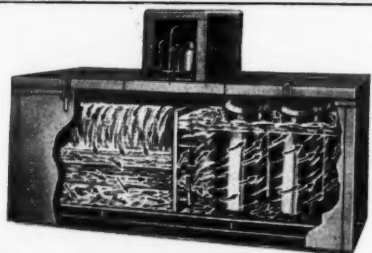
"ADVANCED" Refrigeration Compressor, Model 100—1 1/2" x 1 1/2"—2 cyl., flywheel 10" diam., 2-groove "A" section—1/2 HP. For use only with Freon refrigerant.

WILSON
SELF-CONTAINED
AUTOMATIC
HIGH WATER LEVEL
ZERO-FLOW

STOPS MILK SPOILAGE

COOLS
THE DANGER ZONE
FAST

Wilson ZERO-FLOW
MODEL ZFB HX50



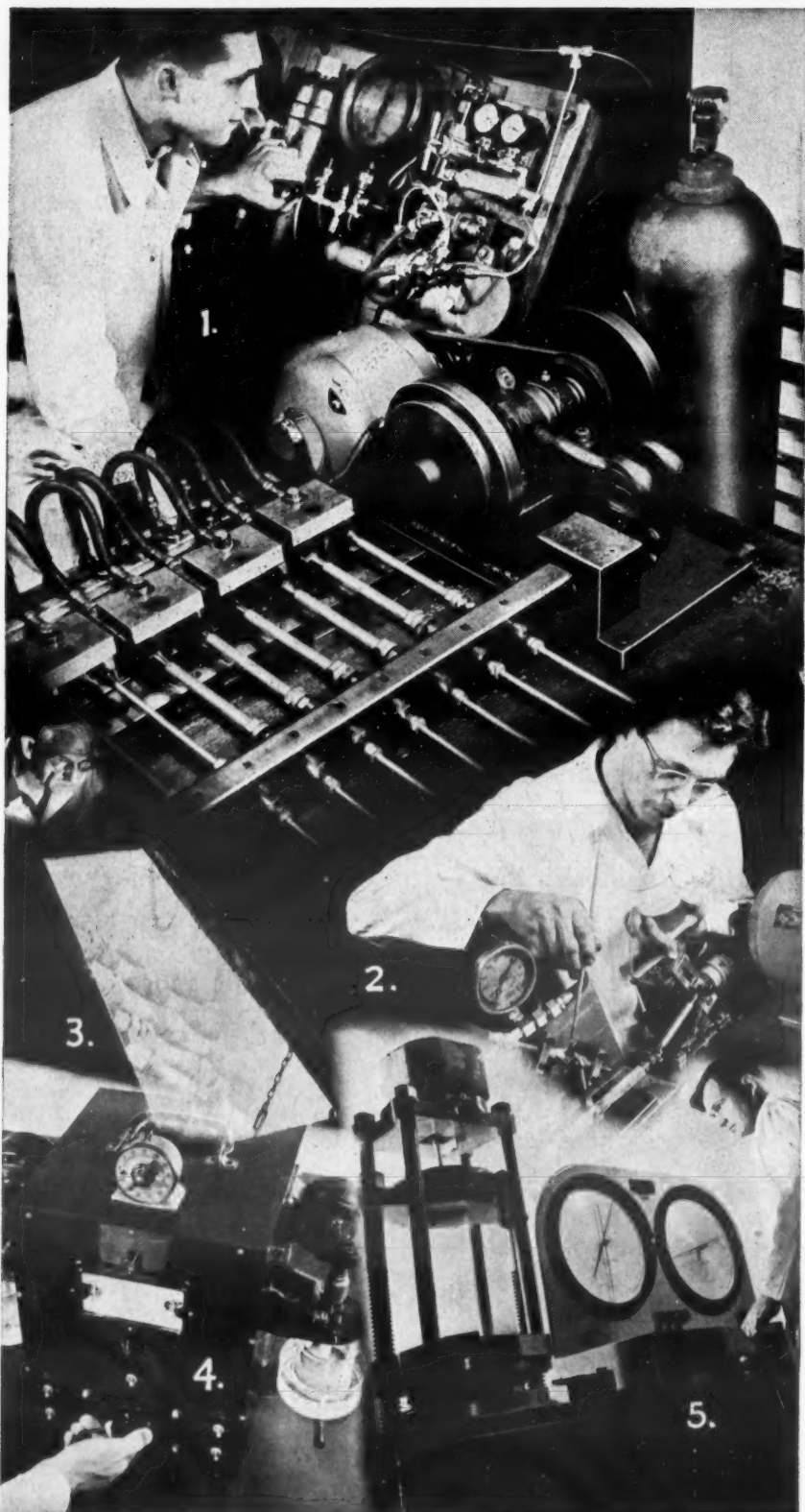
Packaged-Unit Milk Cooler
Sizes from 4- to 24-can capacity

TO CAPTURE AND HOLD **THE FARM MARKET**

Specify Genuine "Refrigeration by Wilson"

• FARM MILK COOLERS • FARM FREEZERS • FARM REACH-IN REFRIGERATORS • FARM WALK-IN REFRIGERATORS

For Franchise Information, Address Dept. II **WILSON REFRIGERATION, INC.**, Smyrna, Delaware



MASTERS OF THE

"Third Degree"

THE TOUGHER WE ARE on Weatherhead products in the laboratory, the better they will be able to take it in your automobile, refrigerator, mechanical product... any place where hose, valves, or fittings are used. That is why every Weatherhead product goes through an exhaustive third degree before it is made available to you.

For example, there are those exhaustive vibration tests of fittings shown in Illustration No. 1. The vibrator bar in the middle operates continuously at high speed in an attempt to jar these fittings loose while they carry hydraulic fluid under high pressure.

There are those never-ending cycling tests which literally wear the life out of valves, as is shown in Illustration No. 2. The tiniest failure is made evident by a film of soap which the attendant here is applying to the valve.

Then there is the cold box, as is shown in Illustration No. 3, which subjects valves and fittings to sub-zero temperatures while they carry maximum pressure loads.

All the materials that go into Weatherhead products are carefully tested before they are fabricated into parts. Illustration No. 4 shows an electro analyzer using the process of electrolysis to determine the copper content of a piece of brass.

The tensile testing machine shown in Illustration No. 5 stretches a metal test bar until it reaches the breaking point.

These are only a few of the many tests to which Weatherhead materials and products are subjected. They all undergo the third degree before they receive the Weatherhead seal of approval. That's why Weatherhead products receive the consumers' seal of approval.

Look Ahead with

Weatherhead

THE WEATHERHEAD COMPANY, CLEVELAND 8, OHIO



NEW YORK • DETROIT • CHICAGO • ST. LOUIS • ATLANTA • DALLAS • LOS ANGELES

WEATHERHEAD PRODUCTS INCLUDE:

Fittings • Cylinders • Drain Cocks • Hose Assemblies • Dash Controls • Packing Regulators • Valves • Dehydrators • Strainers

Selling Replacement Hermetics Suggested As Serviceman's Answer to Repair Problem

CLEVELAND—Manufacturers of hermetically sealed condensing units will be willing to turn over the servicing work on these units to refrigeration service engineers as soon as the service engineers demonstrate that they have sufficient knowledge to do the job properly, L. W. Larsen, assistant sales manager of Tecumseh Products Co., told members of the Refrigeration Service Engineers Society at their annual convention last Oct. 28.

Generally, Mr. Larsen recommended that rebuilt units be substituted for the faulty machines rather than the service man trying to repair them and emphasized the possibilities of more profit through replacement sales. Parts in the hermetic unit are held to very close tolerances, he pointed out.

If the service man expects to handle hermetic units, he must train himself for the job, Mr. Larsen declared. Trade papers, schools, manuals, and papers read before the Society offer the necessary information, he said.

This information must be widespread among the trade before the manufacturers will entrust service to the refrigeration engineers, he added.

Mr. Larsen traced the development of the hermetic unit and pointed out that service men have had no chance to service them because such service was handled through regular distribution channels.

However, as some manufacturers have folded up, the servicing of their units has fallen upon the independent refrigeration service engineer, he said.

In many cases, he declared, the service man put in the wrong refrigerant and ruined the compressor, allowed moisture to get into the system, installed the wrong expansion valves, and, in general, failed to understand the system.

Manufacturers are interested in the service of their units, he said, but their reluctance to call on the refrigeration service engineer is due to the inability of the service man to handle the service.

Servicing hermetic units, Mr. Larsen believes, should be limited to checking the trouble and replacing external parts. Complete exact replacement is the best policy, he affirmed.

Rebuilt units should increase customer satisfaction, Mr. Larsen asserted, even though it means less profit from servicing, it should mean more profit from replacement sales for the service man. Replacement merchandising is increasing, he indicated.

Though a five-year warranty is now attached to domestic hermetics, Mr. Larsen proposed that the warranty be reduced to 90 days. He suggested that the industry has progressed to the point where extravagant warranties are unnecessary.

Distributors and dealers would like to be rid of the servicing function and concentrate principally on selling, he stated.

Warner, New Locker Mfrs. & Suppliers Assn. Head, Outlines Standards at Show

CLEVELAND—L. O. Warner of Refrigeration Service Shop, Inc., Dayton, Ohio, was elected president of the Frozen Food Locker Manufacturers & Suppliers Association, following its annual meeting held here during the All-Industry Exposition.

At this meeting, Mr. Warner, who is also chairman of the association's standards committee, outlined the set of standards for locker plants now in preparation. These standards will probably be completed in the near future.

Several designs of large decalcomanias which are being prepared by the group for its members to apply on locker plants were also shown and discussed at this meeting.

"On the main door to a locker room there is usually a large nameplate of the door manufacturer, but there's nothing to show who constructed and installed the plant as a whole," explained R. R. Farquhar,

secretary and executive director of the association. "These decalcomanias will carry the name of the contractor and the seal of the association."

The membership voted permission for the directors to consider a possible increase in dues, if the directors should find such a move advisable in the next few months. It was also agreed that a definite policy should be established with regard to "off year" regional meetings held by associations of locker plant operators.

Besides Mr. Warner, the officers of the association include Mr. Farquhar, secretary, and Geo. C. Foerstner, treasurer. Both were re-elected.

J. A. Smith of Frigidaire Division, General Motors Corp., and John L. Hoppe of Meat Merchandising, are new directors, the board also including the officers and R. A. Baxter, Roger Sprague, C. C. Ryan, and J. W. Witte, retiring president.

SAVE YOUR TIME BUY BY MAIL

Washington D. C. dealer writes:

"Many thanks for your very fine service and promptness in filling our orders. We honestly find it more convenient and infinitely more satisfactory in every way, to buy from your firm, in Chicago, rather than chasing around trying to find similar material here in Washington."

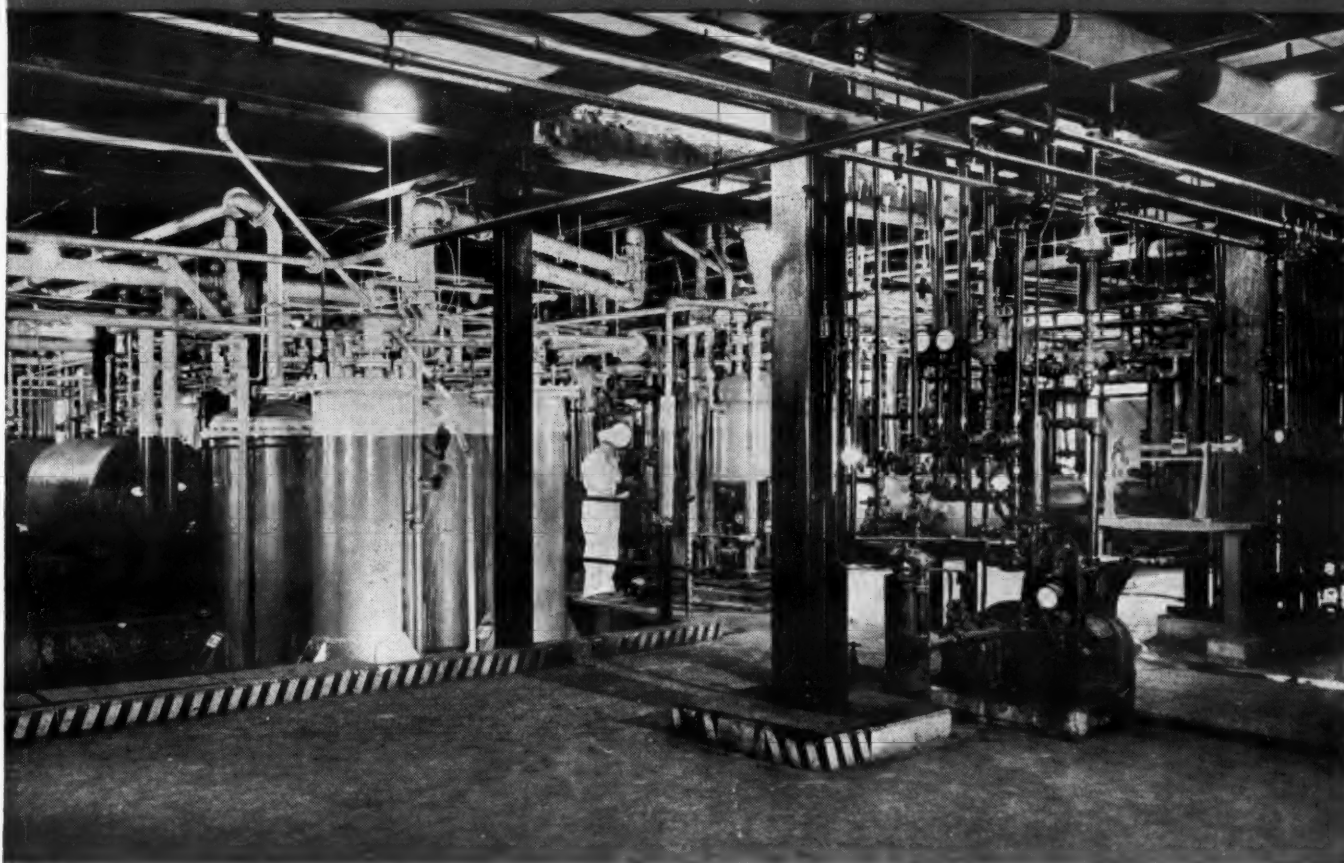
Air Conditioning and
Refrigeration

Parts - Tools - Supplies
Shop Equipment

Request Catalog on Your Letterhead



Behind the Scenes in the "FREON" Plant



Complicated Equipment Produces this Safe, Non-Corrosive Refrigerant

This labyrinth of piping, valves, gauges and pumps is part of the plant where "Freon" safe refrigerants are made. Highly specialized apparatus—plus utmost care and "know how"—insures purity and uniformity... factors which guard against corrosion, oxidation or other injury to the precision parts of modern refrigerating systems.

From the very beginning, and throughout the highly complicated manufacture of "Freon"—a process requiring a wealth of technical knowledge—each step of the operation is under constant chemical and physical control. Rigid specifications must be met. Standardized tests provide a continuing check, both on production efficiency and

the exceptional purity and quality of these ideal refrigerants.

To insure long-lasting, trouble-free operation of modern, compact refrigerating systems... and to obtain maximum refrigerating satisfaction in commercial, frozen foods, and low-temperature industrial installations, specify equipment designed to utilize "Freon". Consult our Engineering Department for specific details. Write, Kinetic Chemicals, Inc., Tenth and Market Sts., Wilmington 98, Del.

IMPORTANT FEATURES OF "FREON" SAFE REFRIGERANTS

1. Freedom from moisture... less than 25 parts per million.
2. Narrow boiling point range—confined within limits of 1/2°C.
3. Less than 2% of insoluble gases in vapor phase.
4. Freedom from acids. There are none in "Freon".
5. Freedom from impurities... less than 1/20 of 1%.



Are you fighting HIDDEN REFRIGERANT LEAKAGE?

Spot it immediately with
VISOLEAK

VISOLEAK detects even the smallest leaks before they cause damage to expensive refrigeration systems. Years of use prove it safe, economical, easy to use.

NEW CHARGING SET

The VISOLEAK Charging Set was developed to inject VISOLEAK, add refrigerant oil or re-charge sealed units. For use on all types of refrigeration systems without danger of introducing air or foreign matter.

Charging Set—complete with hoses \$7.50
Filler only—without hoses 6.00

See your refrigeration supply jobber or write for complete information.

WESTERN THERMAL EQUIPMENT CO.

1701 West Slauson Ave.,
Los Angeles 44, Calif.



"Never mind the store—save my BUSH COOLER!"

Freon Condensers • Dry-Ex Water Coolers
• Evaporative Condensers • Forced Con-
vection Units • Oil Separators • Liquid
Receivers • Heat Exchangers • Pipe
Coils • Hi-Peak Water Coolers • Flooded
Water Coolers • Ammonia Condensers
Write for Catalog on any item

ACME INDUSTRIES
JACKSON, MICHIGAN
Offices in principal cities

NOW! Complete Stock Prompt Shipment

FORGED FLARE NUTS AND FITTINGS
Electromatic

2100 INDIANA AVE CHICAGO 16 ILLINOIS

**OVER \$2,000,000 SALES
IN 1946!**

Distributors and dealers felt the sales "pull" of the new Hudson Constant Pressure Carbonator in 1946. Here is a sales leader that really leads . . . with features that make easy selling for you.



Above Cut Shows Simplicity of Hook Up.
Only Three Connections to make.

HUDSON CONSTANT PRESSURE CARBONATOR

Sensational! Revolutionary! A complete, compact, self-contained carbonator that delivers a steady flow of sparkling carbonated water at a **CONSTANT PRESSURE** up to 125 pounds at the draft arm regardless of city water pressure.

**Used and endorsed by ice cream manufacturers everywhere!
Standard equipment with many soda fountain manufacturers!**

Thousands of Hudson constant pressure carbonators are now in daily use throughout the world. The constant pressure feature is exclusive with Hudson. No other motorless carbonator has constant pressure because Hudson has the constant pressure feature thoroughly covered by patents issued and pending.

NOTE THESE FEATURES:

- No motor.
- No pumps to pack.
- No damp basements.
- Constant even pressure.
- Entirely automatic.
- Requires no electricity.
- Compact—Requires little space.
- Automatic purging.
- Eliminates soda coils.
- Requires no oiling or greasing.
- Requires no floor space.
- Entire unit installed inside fountain or bar.
- Maximum capacity—25 gallons per hour.
- Will operate root beer barrels or Coca Cola dispensers.

A Quality Product from the House of Hudson

HUDSON PRODUCTS COMPANY

4400 St. Aubin Avenue • Detroit 7, Michigan • TEmple 2-0690

EXPORT DIVISION • 2111 Woodward Avenue, Detroit 1, Michigan, Cable: FORACO

Carrier-Mandell, Inc. Organized In Boston

BOSTON—Formation of Carrier-Mandell, Inc. to sell and service air conditioning, refrigeration, and ventilation equipment has been announced here by Founders Earl G. Carrier, Thomas P. Mandell, and James P. Licandro.

Offices of the new firm are located at 177 State St. A sheet metal shop is maintained at 307-311 Atlantic Ave.

Cold Storage Warehouse Gets Approval of CPA

MEDFORD, Ore.—C.P.A. approval has been obtained for construction of a two-story cold storage warehouse at Medford, Ore., for the Northern Refrigeration Co., to be 75 x 185 ft. in area, and to cost \$75,141.

Frozen Food Plant Wins Endorsement of Commission

FORT PIERCE, Fla.—Proposed establishment of a frozen food plant here was given the official endorsement of the Fort Pierce City Commission.

Servel Votes Dividend

EVANSVILLE, Ind.—A year-end dividend of 30 cents per common share has been voted by Servel, Inc.

Airtemp Reaches a 'New Low' in Refrigeration

One of the cold test rooms in Chrysler Airtemp's newly completed laboratories in Dayton, Ohio, goes down as low as -240° F., the lowest ever reached by mechanical refrigeration, according to Airtemp. There is also a room held at 0° and another at -70° F., all three of which are pretty cold, as Dorothy Wenzel will readily attest, despite her stratosphere flying suit to inspect the rooms.



'240° Below' Room Provided In Extensive Laboratories Just Completed by Airtemp

CLEVELAND—Completion of a new Chrysler Corp. engineering laboratory at Dayton to be devoted to air conditioning, heating, and refrigeration research and development, was revealed last week by D. W. Russell, president of the Airtemp Division of Chrysler Corp., during the All-Industry Show.

In disclosing that the research building is now in full operation, Mr. Russell said that it marks the achievement of a goal set up back in 1935 when Airtemp was founded, and is part of Chrysler Corp.'s widespread engineering activities.

Mr. Russell pointed out that the new facilities include, among other things, separate rooms for testing of packaged air conditioning units, room coolers, condensing units, rating of large and small compressors, and a room for testing the various types of heating equipment.

Three big cold rooms have been designed to maintain temperatures of 0°, -70° F., and -240° F., respectively. All three of these are lined with solid cork insulation, and the one which is designed to maintain -240° F. will be, it is reported, "the coldest spot ever created by mechanical refrigeration."

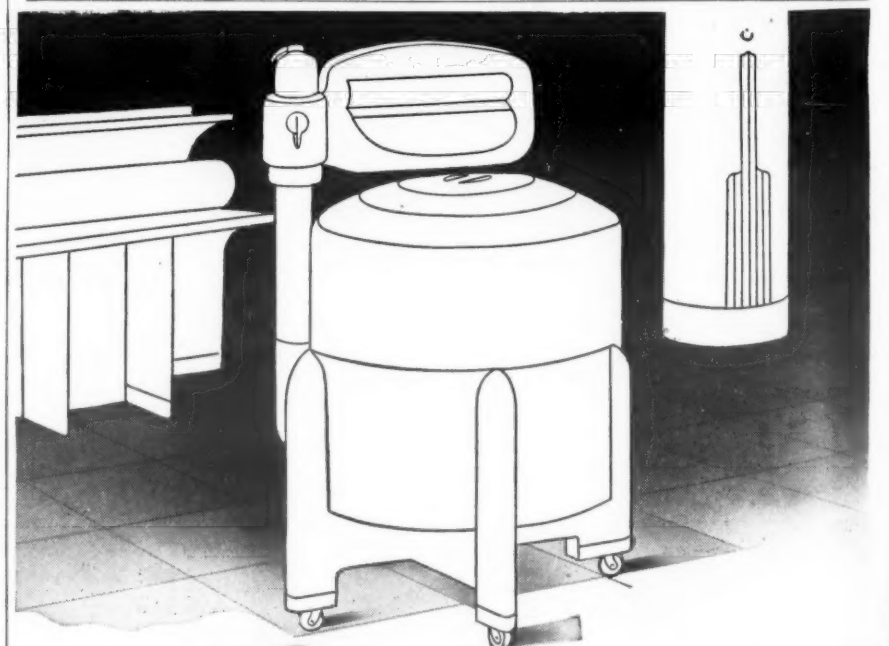
Another feature is the provision

for supplying any type of electric current—either DC or AC, and in any cycle. For example, current can be provided in 20, 25, 40, 45, 50, 60, and on up to 400 cycles.

Also included are facilities for the construction of all types of working models of the various types of refrigeration, air conditioning, and heating equipment. In this department, Chrysler Airtemp engineers completed test models of the new "sealed radial compressor" which was exhibited at the show here and will be put into production as fast as materials and supplies become available in sufficient quantities.

In the heating department of the new laboratory, Chrysler Airtemp engineers check every phase of fuel combustion in order to determine the efficiency of Airtemp gas, oil, coal furnaces, and stokers. The viscosity of the oils is checked and the calorific value of the heating gas recorded, flue gas samples are analyzed and temperatures recorded. All types of competitive heating equipment also undergo similar thorough tests here.

Engineers in this new laboratory have set up a series of refrigeration compressor test lines where the compressors undergo "breakdown tests."



GRANODIZE FOR PURE WHITE FINISH Durability and Superluster



Cold SPRAY-GRANODINE prepares metal surfaces for the durable, clear white, lustrous finish—demanded by discriminating housewives—on washing machines, refrigerators, kitchen cabinets and other metal household utilities.

"Granodine" produces, at low temperature, a uniform zinc phosphate coating that anchors paint firmly to metal for permanent pro-

tection and also prevents the spread of rust, from accidental injury. It enables the lustrous finish to hold even where it must take "hard knocks" and under exposure to excessive moisture.

Granodizing is the manufacturer's assurance to dealer and consumer that the beautiful finish of his products will endure.

AMERICAN ACP CHEMICAL PAINT CO.
AMBLER PENNA.

Borg-Warner Purchases Superior Sheet Steel Co.

CHICAGO — Borg-Warner Corp. (parent company of Norge) has announced that it has purchased the physical assets of the Superior Sheet Steel Co. of Canton, Ohio, to provide an additional source of sheet steel to increase production in the current housing emergency.

Transfer of ownership will be effective Dec. 2. The Superior mill after the transfer will continue under its present management personnel as a division of Borg-Warner.

Commenting on the purchase, C. S. Davis, Borg-Warner president, said: "Under the unprecedented requirements of the National housing program we found it necessary to provide an additional source for steel sheets to be used in the manufacture of the Ingersoll utility unit for homes, and of the Norge house furnaces, space heaters, kitchen ranges, and other household appliances."

"The acquisition of the Superior mill is expected to increase our supply of steel sheets. However, we have no intention of extending into the sheet steel industry and shall continue to rely upon the large established mills for 85% or more of our current expanded requirements."

September Washer-Ironer Shipments Near Peak Level

CHICAGO — September factory shipments of household washers and ironers were second highest for any month in 1946, according to the American Washer and Ironer Manufacturers' Association.

Washer shipments for September totaled 184,215 compared to the year's high of 186,965 reached in August. September's total represents an increase of 12.3% above 163,324, the monthly average for 1941.

Shipments of ironers, according to the association, were 13,413, compared to 10,869 in August and 14,201 for June, which was this year's top month for ironers. 1941 average monthly shipments were 17,991.

Total shipments of washers for the first three quarters of 1946 are 1,364,007; ironer shipments for the same period were given as 85,420.

MANHATTAN WHIPCORD FHP V-BELTS

MORE POWER

— Engineered to grip the grooves without slip. Flexible, low tension "pull."

SILENT RUNNING

— Uniform construction; noiseless on high speed drives.

LONGER WEAR

— Whipcord Endless Cord construction reduces internal heat, withstands side wear.

RAYBESTOS-MANHATTAN, INC.
MANHATTAN RUBBER DIVISION
EXECUTIVE OFFICES AND FACTORIES: PASADENA, CALIF.

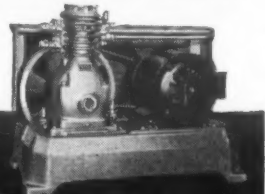
Certified

BY A QUARTER CENTURY OF REFRIGERATION KNOW-HOW

Plan your automatic refrigeration installations for a triple advantage: Proved performance, low first cost, low maintenance cost. LIPMAN machines for dependable service in any field of commercial refrigeration are the result of more than a quarter century of manufacturing know-how. Let LIPMAN serve your needs profitably!

GENERAL REFRIGERATION DIVISION

Yates
American
Machine Co.
Detroit, Wis.



Lipman
AUTOMATIC REFRIGERATION

AIR CONDITIONING condensers and coolers designed and built FAST

We design, build, retube or rebuild quickly any unit with tubes, standard or special, for Freon, ammonia, CO₂. Materials on hand for prompt delivery. Emergency maintenance work 24 hours a day, anywhere.

Condenser Service & Engineering Co., Inc.
88 River Street, Hoboken, N. J.
Phone HObooken 3-4425, After 6 P. M. or Sundays, HObooken 3-4428

Some Gone Even Before Advertisement Appeared

In Factory-Conducted Merchandising Test, St. Petersburg Dealer Sells 70 Home Freezers In Two Days

ST. PETERSBURG, Fla.—A carload of approximately 70 Hotpoint home freezers was sold in two days at St. Petersburg, in a merchandising test held earlier this fall by the manufacturer with Keesler Electric Co., long-time Hotpoint dealer, making the transactions.

St. Petersburg was selected because of specific characteristics that the manufacturer wanted included in his testing ground. Among those according to Floyd M. Slasor, manager refrigerator sales division, Edison General Electric (Hotpoint) Appliance Co., was the effect of salt-tainted air on the cabinets' finishes.

Harry Keesler, operator of the retail company, said that as a result of a "waiting list" he sold 10 home freezers before the first advertisement appeared and the others were sold after a quarter page display advertisement here in the *St. Petersburg Times*.

Among promotional pieces used in the merchandising operation were the large advertisement noted above and smaller advertisements on two following days. A majority of the purchasers said that they had seen the advertisements. The Keesler firm also bought spot announcements on a local radio station; they used window signs, and solicitors called several hundred housewives on the telephone to notify them of the product offering.

Utility Aided Program

The Florida Power Corp. cooperated by supplying home service girls to accompany the appliances to the homes of their new owners. The dealer also supplied kits of packaging materials at a cost of \$4.95.

Officials said that 65 of the sales were made for cash while the remaining few were placed on time-payments.

Coincident to the merchandising activity, officials of the store conducted a poll among visitors to the store. Surprisingly, fewer questionnaires were returned than there were units sold, but it was noted that all purchasers had agreed to fill out a statement expressing the various reasons for purchasing the units.

Among comments made was that the 4-ft. home freezer such as used in the selling venture was not of sufficient size. A great many asked for 8 and 12-cu. ft. units. The largest number of expressions of approval were made for the counter balanced top, with the wire baskets as the second most wanted part of the unit.

WAA Offers Plant Run by Westinghouse During War

FAIRMONT, W. Va.—A plant near here which was leased and operated during the war by the Westinghouse Electric & Mfg. Co. has been declared surplus and is being offered for sale or lease by the War Assets Administration.

Designed for the production of radio transmitting tubes, radio equipment and related electronic equipment, the plant has a total reported cost to the government of approximately \$3,374,000.

The plant includes a manufacturing building with 100,000 sq. ft. of industrial floor space, several storage structures, and a cooling tower of 100,000 gal. capacity. The main building contains all machinery and equipment necessary for the plant's function, plus laboratory and testing devices.

The 20 acre site, served by the Baltimore & Ohio railroad and a state highway, includes nine acres of vacant land suitable for expansion, according to the agency.

One of a series of excerpts from the Hotpoint library of Planned Electrical Merchandising.

how CUSTOMER'S NEEDS set the sales pattern!

Do APPLIANCE SALESMEN "bargain in where angels fear to tread?" Do they try to sell an appliance before finding out what the customer needs—and why?

With a few adroit questions about her family, her home, her outside activities, the good salesman gets his customer to talk about herself. The information he gleams gives him the green light on selling an appliance that suits her needs.

Try patterning the sale to the customer's needs to sell a Hotpoint Electric Clothes Washer:

- 1 Find out how large a family she has; the size of her washing. If large, sell her on the large capacity tub. Find out if she washes heavy shirts and pants as well as dainty dresses—stress the triple action washing. Do her children sometimes help on washday?—explain the safety features. Is time an important factor in her day?—explain how she can save time with a Hotpoint Electric Washer.
- 2 Take her over to the washer. Explain how and why the Thriftivator and Lovell Pressure Cleanser Wringer, etc. answer her problems.
- 3 Give her a demonstration of the Washer at work. Let her operate it herself.

Such a sale pattern will convince her she WANTS a new Hotpoint Electric Washer—because you have proved it is the answer to her NEEDS!

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Hotpoint
HOME APPLIANCES
Dependability Assured by 40 Years Experience



Refrigerators



Ranges



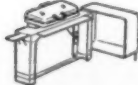
Water Heaters



Home Freezers



Clothes Washers



Flat Plate Ironers



Clothes Dryers



Dishwashers



Disposals



Cabinet-Sinks



Steel Cabinets

MANUFACTURERS
ARE CONSIDERING
EQUIPPING
KITCHEN CABINETS
WITH STAINLESS STEEL
SHELVES



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PRODUCTS
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RETINNED REFRIGERATOR SHELVES AND WELDED WIRE PRODUCTS

Alert Servicing, Consumer Education Can Spur Acceptance of Home Freezer, Says E. T. Benson

CLEVELAND—"Progress in the new home freezer field may be seriously retarded if manufacturers, merchandisers, and service departments do not shoulder responsibility for servicing equipment and educating the user," E. T. Benson, of Frigidaire's service technical department, told members of the Refrigeration Service Engineers Society at their annual convention here during the All-Industry Show.

Mr. Benson outlined for the engineers, the responsibilities of the manufacturers, sellers, service men, and user in proper servicing of home freezers.

Responsibility of Factory

He pointed out that "the factory has the responsibility of designing and manufacturing a quality product, free from defects." The product must be designed, he added, so that it can be serviced at the least possible expense to the user.

The factory, he said, must distribute its product through reputable organizations. It must scrutinize selling organizations to be certain that the manufacturer's code of requirements is being fulfilled.

The factory must assume responsibility of educating distribution and service organizations on the proper application, operation, and servicing of its products, he declared. Service parts and assemblies must be provided.

Selling organizations must analyze the needs of their prospects and sell them products to fill those needs, Mr. Benson asserted. They must educate the user on proper methods of food processing and freezing.

Many firms, he added, have already conducted extensive research work and tests to determine what foods can be satisfactorily frozen, and the best methods of preparation, wrapping, freezing, and storage.

Role of Salesmen

"Selling organizations must become firmly entrenched with the buying public by building up customer acceptance and enthusiasm for the home freezer. Adequate service organizations are necessary to further this step," he declared. They must be able to provide quick service and advise the customer what to do during the breakdown to prevent food spoilage, he added.

Getting down to cases with the service men, Mr. Benson pointed out that service engineers should be able to advise users as to correct methods of food processing, freezing, and storage; orientate the user on basic fundamentals of low-temperature cabinet operation; and maintain a speedy repair service.

Service Man Can Help

"The service man must know where to place food packages in the freezer for freezing purposes," Mr. Benson explained, "and must know the approximate amount of foods that can be frozen in a freezer—in addition to normal storage."

"The freezing capacity, of course, will depend upon the condensing unit capacity, design of storage compartment, amount of food already stored in the cabinet, and the heat leak load of the freezer cabinet."

"Many foods," he went on, "are recommended as being safe to freeze and store for a year at 0° F. When temperatures rise above this point, the storage time is reduced, and if the temperature rises sufficiently, thawing will take place. For instance, fruits frozen in syrups will thaw at temperatures from 15° to

28° F. Frozen vegetables and meats will thaw at 29° to 31° F.

He cited as an example tests made with an ice cream cabinet which showed that 24 hours after the condensing unit had ceased to operate, temperatures of -6°, -4°, and 4° F. at various points within the cabinet had risen to 12°, 24°, and 32° F., respectively.

Urging service men to make necessary repairs within 24 hours after the refrigeration unit has ceased operation, Mr. Benson asserted. "This does not mean 24 hours after the report is received, nor after the service man starts work on the cabinet—but 24 hours after the unit has ceased to refrigerate."

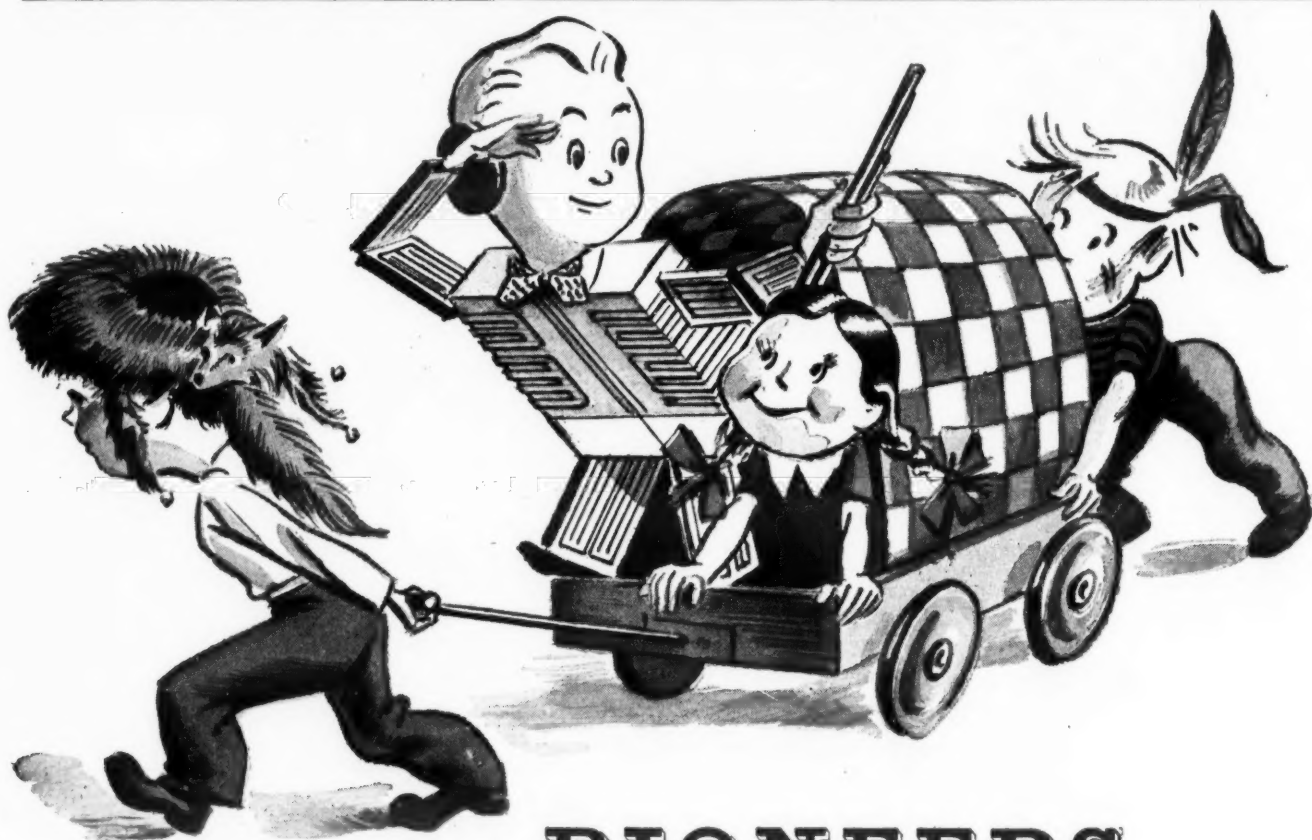
"We can also assume," he added, "that unless refrigeration is re-established within 72 hours, thawing will have taken place to the extent that some of the food will no longer be frozen. At the end of 108 hours, or four and one-half days, temperatures noted during the experiment were 28.5°, 37°, and 55° F., respectively."

User's Responsibility

In the cycle of responsibility outlined, Mr. Benson said that the user has the responsibility of using the freezer properly, keeping it oiled, testing the alarm device, and notifying the service man as fast as possible after a breakdown occurs. He also has the responsibility of checking any other electrical failure he might have to determine the effect on the freezer, he said.

"Home freezing is comparatively new to the average person," Mr. Benson explained. "It is true that many homes are familiar with commercially frozen foods and with the household refrigerator. But the average user is not acquainted with storing large quantities of highly perishable foods, which are dependent upon the continuous operation of one piece of mechanical equipment—the home freezer."

"If we do all in our power to inform and educate the user, we, in turn, will benefit from the growing customer acceptance and enthusiasm," he said.



PIONEERS

STANGARD's long years of experience in the refrigerating field plus their constant efforts for the betterment of low temperature equipment has resulted in their Prime Surface* Cold Plates. This plate...known for its uniform temperatures...faster pull-down...low first cost...economical performance...and trouble-free operation...makes for the highest degree of refrigerating efficiency.

The results of Stangard's pioneering will benefit you—take advantage of it!

Whether for locker plants...display cases...food counters...soda fountains...trucks...liquid coolers...ice cream cabinets...farm milk coolers...farm freeze cabinets...frosted food refrigerators...beverage coolers...rivet chillers...or low temperature test rooms...it pays to specify Stangard Prime Surface Cold Plates!

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LITTLE "STAN,"
THE STANGARD MAN



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500 Lockers Installed, Grocer Finds He Could Use Twice That Number

ORESHAM, Ore. — Because nine frozen food locker plants are operated within a six-mile radius of their 12-Mile Store, Carl and Ada Zimmerman installed 534 frozen food lockers in their market to meet competition. Now they wish they had room for double the number.

Mr. Zimmerman, World War II veteran, declares, "Our monthly frozen food volume exceeds \$1,000. It could easily be \$2,000."

The lockers not only bring an income from rentals, but also profits from dressing, packaging, and freezing the livestock and poultry of farm customers. A chicken-killing room is maintained for the benefit of locker customers.

Still more important, the grocer said, are the gains made in holding patrons who have become "locker conscious." Customers, in Mr. Zimmerman's opinion, are worth almost anything they cost.

"Groceries, meats, and produce," the owner said, "are responsible for a large portion of our \$1,900 daily volume."

Located at the junction of the 12-Mile Corner and Base Line Rd., the 10,300 sq. ft. store is 12 miles from Portland and two miles from this city. For advertising, which is done in excess of \$1,200 monthly, newspapers, radio, billboards, match packets, and other souvenirs are used.

'Frozen Food Fiesta' Stirs Interest In Buffalo, N.Y.

BUFFALO—J. N. Adam & Co. held a week-long Frozen Food Fiesta which brought "terrific" results both in customer interest and sales volume, the store reported.

The store promoted famous names in frozen foods right through the week. The Fiesta was staged on the main floor and free samples were provided customers every day.

Three new frozen pies by Cease Commissaries of Dunkirk, N. Y., were introduced for the first time at the Fiesta. They were chocolate cream chiffon pie, lemon cream chiffon pie, and fresh loganberry rhubarb pie.

Maxson frozen foods caught the spotlight on another day. Milk-fed turkey ready to serve was featured.

Sun-Ann European style hors-d'oeuvres were the highlight on a third day, along with Sue-Ann Welsh Rarebit. Almond crescent cookies were another favorite Sue-Ann product featured.

Empire Will Build Warehouse To Enter Frozen Food Field

BINGHAMTON, N. Y. — Empire Foods, Inc. is "going into the frozen food business in a big way," according to Ben Cohen, manager of the Binghamton concern, who announced that property has been secured on State St. to construct 130,000 sq. ft. of additional warehouse space.

The new warehouse will be built south of its present warehouse at 75 Prospect Ave. This will give Empire Foods direct access to its rail siding. At present Empire has to truck incoming freight from the cars to its warehouse.

Jordan Marsh To Start Frozen Food Delivery Service In Boston Area

BOSTON—Jordan Marsh Co. has announced plans to inaugurate in the near future a frozen food home delivery service, which will tie in with the sale of home freezers.

According to a spokesman for the store, the service at first will be confined to one or two localities and gradually will be expanded to take care of the greater Boston area. Brookline has been selected as the first area to be served.

Present plans call for a scheduled weekly delivery, which will be timed so that a customer will receive items on the same day and at approximately the same time of day each week. A special staff will be selected to place telephone calls to customers at a given time and orders taken one day will be delivered the following day.

Sales of home freezers will be limited for the most part to such customers who can be handled under the frozen food service, the spokesman declared. He points out that "the food service and the sale of freezers are considered as one package." The store stresses, however, that it will serve anyone within the area even though the freezer was not purchased from Jordan's.

Dallas Operator Opens New Plant with 1,568 Lockers

DALLAS, Tex.—The Park Cities Frozen Food Co. has opened its new plant at 4358 Lovers Lane. The company raises livestock on its own ranch to be slaughtered at its own packing plant in Garland for its customers.

The plant is said to be one of the largest in the country. It has 1,568 lockers and facilities for complete processing of meats.

Seattle Department Store Promotes Sale of Home Freezers by Renting Them on 6 Months Trial Basis

SEATTLE, Wash.—A new frozen food service will be put in operation by the Bon Marche department store here.

Frostmaster cabinets, designed to hold 100 lbs. of food and retailing at

\$139.50, are being sold on terms or placed in homes on a six months trial basis and renting for \$2.50 a month with purchase optional.

The operation will be handled through the store's service building.

The entire basement level will be devoted to storage, handling, and telephone order service. Meats, fruits, vegetables, and ice cream will be purchased by the store ready-packaged stored in modern cold-storage rooms and delivered by refrigerator trucks.

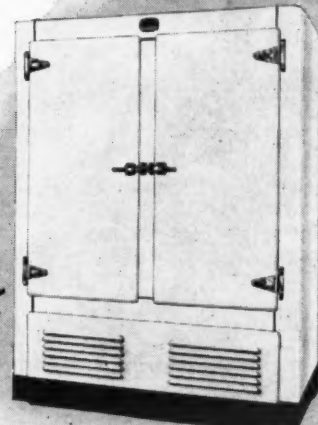
Shortage of cabinets will limit the frozen food service to certain districts for a time, store officials indicate.

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Reach-in Refrigerators will continue to be built to the same high standards that have earned them their present outstanding position in the industry.



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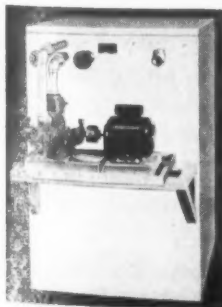
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BUY KELVINATOR FOR ALL YOUR REFRIGERATION REQUIREMENTS

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HIGH EFFICIENCY

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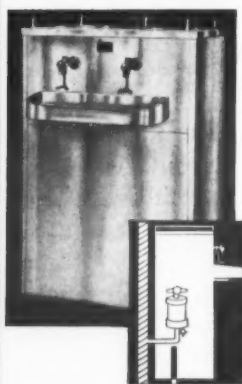
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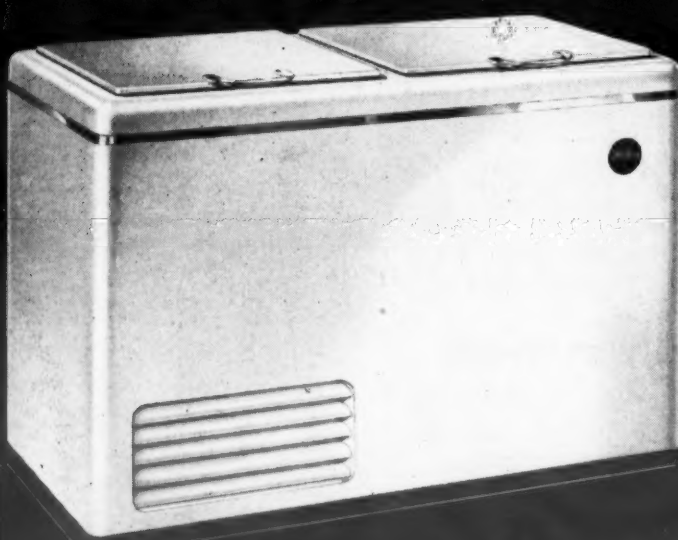
They'll Do It Every Time By Jimmy Hatlo



Out With Special Privileges--Revise the Wagner Act!

the new GREAT NAME in Home Freezers!

WHITING



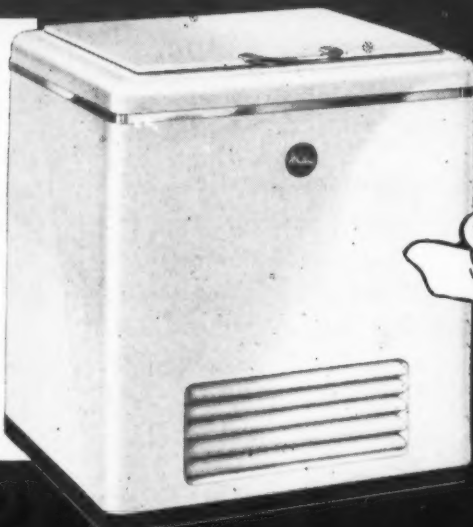
• It is still true, despite current inflationary tendencies, that you get what you pay for. Quality never comes cheap. Shrewd buyers, from housewives to purchasing agents, have always known that value received is the genuine standard of choice. Measured by this sensible yardstick, WHITING HOME FREEZERS return a greater degree of satisfaction, reliability and long-life service for every dollar invested. Make sure the freezer you sell bears "the new GREAT NAME" in home freezers—WHITING!

MODEL F-2000

Spacious 11 cu. ft. capacity of approx. 385 lbs. Powered by a 1/4 hp. removable "Packaged Power" sealed unit. Heavily insulated with 4"-5" Fiberglass. Thermostatically controlled to maintain zero temperature.

MODEL F-1000

Convenient 4 1/2 cu. ft. capacity of approx. 165 lbs. Powered by a 1/4 hp. sealed "Packaged Power" removable unit. Insulated with 4"-5" Fiberglass. Thermostatic control maintains constant zero temperature. Extra large condenser surface eliminates fan or additional cooling devices.



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How Will a Recession Affect Our Industry?

BUSINESS and politics have been so frightfully intermixed and balled up during the last dozen years that it may take quite a while to unscramble them. And, although most business men are probably jumping up and down and clicking their heels in the air over the results of the Nov. 5 election, nobody should assume that all will be sweetness and light from that date henceforth.

True, the long-term significance of that election is wonderful. It marks the end of an era, and a turn to the right. The long-delayed better judgment of the American people—held in suspense by the war and a fear of changing horses in midstream—finally asserted itself. A monstrously false doctrine was repudiated at the polls.

From the short-term standpoint, however, you can bet your bottom dollar that there's grief ahead. Arrogant labor unions, heady with unwarranted power, aren't going to curl up and die. On the contrary, they're likely to cause plenty of trouble in the months to come.

Because the Roosevelt Party gave them unprecedented advantages and privileges, so long as that political group was in power they tried not to embarrass it whenever it appeared that their excesses might be politically inexpedient. They'll have no such inhibitions now. On the contrary, it's probable that they'll do all they can to discredit Republican leadership in the short time intervening between now and the 1948 presidential election.

And then there's that matter of the natural workings of the economic cycle. Several weeks before the Nov. 5 voting, it had become apparent that the war-boom spree had ended. General commodity prices had hit their peak, and had begun to turn downward. And there were signs that even for manufactured goods the honeymoon was over.

Despite strikes, sadly deficient labor productivity, and overwhelming purchasing power, close observers of the merchandising scene were noting that a buyer's market had returned—in a tentative sort of way.

Increasingly, cash-happy consumers have been turning up their noses at shoddy, overpriced merchandise. Department store executives, who keep big ears close to the ground, have been curtailing inventories and planning to unload all their off-brand and off-standard stuff at Christmas.

This situation has all the earmarks of a short-lived recession. Practically nobody expects a depression. We all need too many things denied us for too long for that. Somewhere along the chart the steep upward curve of people's delayed needs will cross the sliding curve of their willingness to work. And again, never in our history has cash been so abundant, or credit so free and willing.

But a mild recession of, say, six to eight months seems to be in the cards.

How will that affect the refrigeration, air conditioning, and home appliance business? So far as we can see now, it can't do anything but help it.

The backlog of real need is so tremendous, the new uses and new markets are so vast, that our industry should easily ride out the commercial squalls predicted by the economic weathermen. In the meantime, a labor shortage may turn into a labor surplus, whereupon the more inefficient and nasty-dispositioned workers can be eased out. And, from industries which will be hurt by the recession (such as machine tools and luxury gadgets) will come the release of now-scarce materials.

Anyone who attended the All-Industry Exposition in Cleveland and talked with enough people surely was impressed by the fact that the refrigeration, air conditioning, and home appliance business is confronted with a demand and a need for its services far beyond anything we have known in the past.

Only the most incorrigible of pessimists could worry over now the coming recession could affect this business.

Farr Tells Contractors NARC Is Ready For Aggressive Attack on Trade Problems

Jones Urges Unfair-Practice Curb Through FTC

By John Sweet

CLEVELAND—With organizational details out of the way, the National Association of Refrigeration Contractors announced in a friendly but firm voice during the All-Industry Exposition that it is "prepared to act aggressively and thoroughly on any matters of interest and importance to this phase of the refrigeration industry."

The "voice" was that of Warren W. Farr, president. He was concluding his report opening NARC's first annual convention, held in the Hotel Allerton here.

In the 21 objectives, Mr. Farr summarized, "NARC has quite an elaborate and long-range program. In the nine months of its existence, a splendid start has been made . . . progress is certain to be accelerated during the next year."

"Refrigeration contractors now have their own trade association, whose principal object is to promote, protect, and stabilize that business. An important and valuable file of information on this business is being accumulated. . . .

"The opportunities are tremendous, but for satisfactory progress, the co-operation and support of refrigeration contractors everywhere must be had."

Mr. Farr's report covered the growth and accomplishments of NARC since the organizational meeting Jan. 21-22, and reviewed objectives. Among activities cited was the group's efforts to alleviate the shortages of small motors and "Freon."

"We are still endeavoring to get more recognition on the available supply of small motors," he noted. "However, most of them are evidently going to large and influential buyers, despite Priorities Regulation 32, which forbids more than a normal inventory."

'STOPPED ONE LEAK'

"We did succeed in stopping one source of leak when . . . fractional horsepower motors were put under export license control by the Civilian Production Administration. We are still working with this agency as well as the Small Business Division of the U. S. Department of Commerce."

He said NARC is still persisting in its "continuous and aggressive efforts to obtain badly needed 'Freon.'"

"This is an entire industry problem, reaching even beyond the industry, into the many thousands of business places that process, transport, and preserve food," Mr. Farr declared, "because most of the equipment is dependent for operation on a gas made and distributed by only one manufacturer. Unless the production is ample for the needs, and unless the method of distribution is such that 'Freon' can be obtained quickly, then the industry and the users of equipment are in a hazardous position."

Turning to unfair trade practices, which he called "one of our most troublesome and important problems," Mr. Farr noted that NARC has accumulated "quite a file" on the subject, including complaints. These, he said, have been turned over to the Federal Trade Commission, at its request, to supplement the formal complaint made to the commission by one of NARC's affiliates, the Refrigeration Contractors Association of Northern California.

Among other files that have been set up are being established is one on contracting statistics. Mr. Farr said, since there does not appear to be any, he explained that a questionnaire had been sent to members, asking for information on sales volume, wage rates, and the like, and that summarized totals will be compiled.

He also called attention to the files on group insurance and apprentice training which are available to local groups or members. Another project, that of preparing suggested operating forms, will be undertaken soon, he said.

In reviewing other activities of NARC, Mr. Farr mentioned that "strong and favorable contacts have been established and maintained with all other industry groups, the trade press, and various governmental agencies."

Asserting that "I suppose the unfair practices in our own industry could be counted by the scores," Z. E. Jones, secretary-manager of the

Refrigeration Contractors Association of Northern California, urged utilization of existing State and Federal laws to combat these tactics.

Mr. Jones said the industry should not hesitate to resort to the Federal Trade Commission, the Clayton Act, the Antitrust Division of the Department of Justice, the Fair Trade Laws, and other laws of the land adopted to preserve and regulate competition.

"In the next few years," he warned, "we will face keener competition and more and more unfair competition. I speak now of the dairy and ice cream interests, the beverage cooling industry, the frozen food industry, and all industries that may be inclined or tempted to engage in practices which are unfair to the refrigeration business."

"Our industry is still in its development stage and we ought to look ahead and do some long-range planning. While being friendly with all competing groups and branches of our industry, we should alert ourselves to new ways and means that may be available for meeting our problems."

"Our industry is getting organized," Mr. Jones continued. "It is awakening to the fact that unfair competition is not local but nation-wide; that it will be necessary to adopt methods and procedures that may be foreign to present-day thinking if we are to make real progress."

He declared that many unfair methods of competition "are doomed eventually to failure with the industry's evolution and the ordinary play of common sense and prudent business management."

"Some people believe that unfair business methods have a necessary part in free enterprise and free competition," he said. "I do not share in that belief."

"We have always had, and probably always shall have, some competitors who are bent on practicing unfair methods but the majority of progressive business men will see a long-range advantage in elevating standards of conduct toward each other. These are the men of vision."

"Remember," Mr. Jones emphasized, "where there is no vision, we perish."

CITES FTC PROCEDURE

He called particular attention to the Federal Trade Commission's trade practice conference procedure as offering "a splendid opportunity to attack some of the unfair methods of competition." Under these auspices, he pointed out, trade relations have been examined and greatly improved in many industries.

"Rules defining unfair methods of competition, consistent with existing public laws and decisions of the Federal Trade Commission and the courts, may be set up and agreed to as a result of trade practice conferences held by the Commission with representatives of the various branches of the industry. Once agreed to and promulgated, the rules are given the binding effect of law and are enforceable."

"I should like to see the whole refrigeration industry—manufacturers, wholesalers, and contractors—through their respective national organizations take advantage of this opportunity and adopt such a long-range program. For however we may feel about regulation in general, I will venture to predict that in the next five or 10 or 20 years we will see more regulation safeguarding legitimate business and industry by both State and Federal authorities."

To illustrate one method of controlling price-cutting, Mr. Jones analyzed the workings of California's fair trade law. Under this act, he explained, manufacturers, wholesalers, and retailers may lawfully enter into resale price maintenance contracts on branded merchandise.

Mr. Jones' paper was read by Lee Shirar, NARC director from San Francisco, in the former's absence.

NARC's attempt to alleviate the "Freon" shortage was noted in a report by the legislative committee. It was recalled that officers of NARC had met with representatives of Kinetic Chemicals who, the committee said, "had promised to alleviate the shortage but had failed to come through."

"It was decided," NARC reported,

"before any government action be taken the question would be thoroughly briefed by counsel and submitted to the board of directors for approval."

In another committee report, E. S. Wright presented data on trade press publicity given NARC and its affiliated associations. He expressed appreciation for the cooperation of the publications.

A proposed constitutional amendment to increase the per capita annual dues of affiliated associations was adopted unanimously. Its adoption was recommended by A. M. Palen, treasurer.

Two gavels were presented to President Farr during the sessions. One was presented along with a parchment scroll by Perry Grocott on behalf of the Mahoning Valley association, of Youngstown. The other was made by G. W. Lance, president of the Arizona Refrigeration Association, and was presented by Roy Perry, past president of that group.

Reporting on results of the convention, the association said that 75 contractors from all parts of the nation joined NARC during the meet-



New 1946-47 directors of National Association of Refrigeration Contractors. Standing (left to right): F. J. Zoppel, Lee Shirar, Warren W. Farr (president), C. R. Faulkner, E. S. Wright (first vice president). Seated: A. M. Palen (treasurer), L. C. Anderson (sergeant-at-arms), W. L. Drake, Nathan Edelstein (recording secretary), William G. Euth, J. F. Park (second vice president) and Ralph Lampie were absent when photo was taken.

ings and exposition. In addition, it stated, it appears that many local associations soon will be organized.

Following a special conference with contractors from Oregon and Washington, NARC said that plans were made for greatly enlarging and

strengthening the two associations in Washington and that "it seems evident that a new state organization will be formed in Oregon, with Portland as headquarters." It said the same trend was evident in a number of other states.

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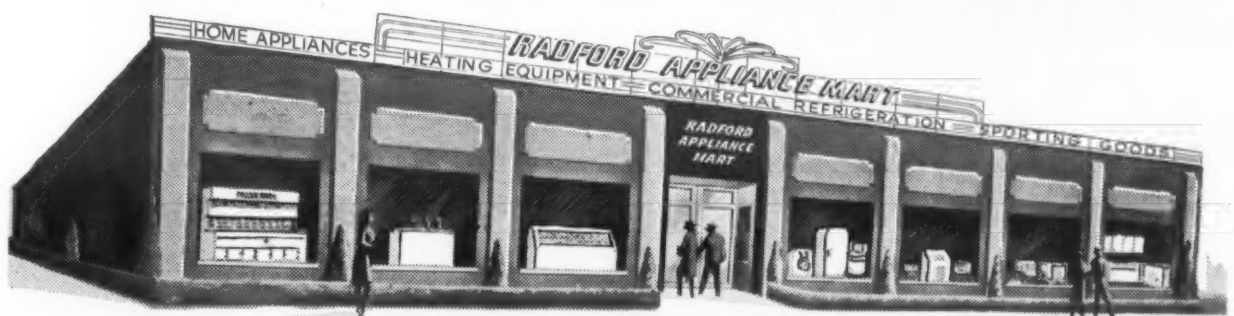
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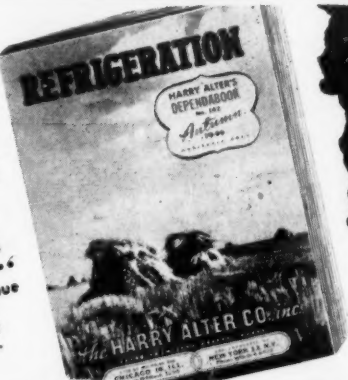
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FOR SERVICE AND PARTS—WRITE TO SERVICE PARTS

Andre Merle Associates Open Washington Office

WASHINGTON, D. C. — Andre Merle Associates, architectural engineers, have announced the opening of a new office in the Southern building here.

The firm specializes in engineering design, detailing, specifications, and costs analysis for air conditioning, heating, ventilating, plumbing, and commercial refrigerating systems.

Frigidaire Plans New Office, Warehouse in L.A. Suburb

VERNON, Calif. — Building permit has been issued for construction of a concrete, steel frame, and plaster office and warehouse building at Leonis Blvd. and Alcoa Ave., Vernon, in suburban Los Angeles, for the Frigidaire Division of General Motors Corp., to cost \$175,000.

R.M. Humphrey Joins Iceberg, To Work in Service Department

NEW YORK CITY — Ross R. Smith, president of Iceberg Refrigerated Locker Systems, Inc., New York, has announced the appointment of Richard M. Humphrey as service engineer for the company.

Mr. Humphrey has been in charge of refrigeration installation and service continuously since 1928 for the Kelvinator Sales Corp., Warren-Norge Corp., and Rex Cole, Inc., all of New York.

Servicing Truck Refrigeration Units

Editor's Note: Sometimes truck refrigeration service problems may be the result of the operator's trying to haul produce at the wrong temperature. The second half of a table giving suggested haulage temperatures is presented below. It was prepared in collaboration with Henry O. Kirkpatrick, chief engineer of Advance Mfg. Co., manufacturer of Trail-Aire units.

Instalment No. 8

Commodity	Storage Temperature	Approximate Storage Life	Average Freezing Point
Lamb	32-36		
Lard	40		
Leeks	32	1-3 months	29.2
Lemons	55-58	1-4 months	28.1
Lettuce	32	2-3 weeks	31.2
Limes	45-48	6-8 weeks	29.3
Livers	20		
Maple Syrup and sugar	45		
Meats—canned	40		
Meats—salt after curing	43		
Melons			
Watermelons	36-40	2-3 weeks	28.8
Muskmelons	32-34	7-10 days	28.5
Honey Dew and Honey Ball	36-38	2-4 weeks	28.8
Casaba and Persian	36-40	4-6 weeks	
Milk			
Buttermilk	32-40		
Sweet	32-36		
Mushrooms (cultivated)	32-35	2-3 days	30.2
Mutton	32-36		
Nursery Stock	30		
Nuts, pecans	32-50	8-12 months	19.6
English walnuts	32-50	8-12 months	20.0
Oatmeal	42		
Oils	45		
Oleomargarine	20		
Onions and onion sets	32	6-8 months	30.1
Oranges	32-34	8-10 weeks	
Oxtails	30		
Oysters (in shell)	30-35		
Parsnips	32	2-4 months	28.9
Peaches	31-32	2-4 months	29.4
Pears			
Bartlett	29-30	45-90 days	
Fall and winter varieties	30-31		
Peas (green)	32	1-2 weeks	30.0
Peas—dried	45		
Peppers			
sweet	32	4-6 weeks	30.1
Chili (dry)	32-50	6-9 months	
Pineapples			
Mature green	50-60	3-4 weeks	29.1
Ripe	40-50	2-4 weeks	29.9
Plums (including prunes)	31-32	3-8 weeks	28.0
Pork (fresh)	30-34		
Potatoes	36-50		28.9
Poultry—dressed, iced	30		
Poultry (short carry)	28		
Poultry—frozen	10		
Pumpkins	50-55	2-6 months	30.2
Quinces	31-32	2-3 months	28.1
Radishes	32-36		
Raisins	55		
Raspberries			
Black	31-32	7-10 days	28.8
Red	31-32	7-10 days	30.4
Ribs—not brined	20		
Rhubarb	32	2-3 weeks	28.4
Sardines—canned	40		
Sauerkraut	38		
Sausage casings	20		
Scallops—frozen	16		
Sheep	32		
Shoulders—not brined	20		
Squash (winter)	50-55	2-6 months	29.3
String Beans	40		
Sweet Corn	40		
Strawberries	31-32	7-10 days	29.9
Sugar	45		
Sweet Potatoes	55-60	4-6 months	28.4
Syrup	45		
Tenderloins	33		
Tobacco	42		
Tomatoes			
Ripe	40-50	7-10 days	30.4
Mature green	55-70	3-5 weeks	30.4
Turnips (including rutabagas)	32	4-5 months	30.5
Vegetables—frozen pack	0-18		
Watermelons	40		
Wheat Flour	42		
Wines	50		

BEHIND THE SCENE



Pre-heating or pre-cooling of plane cabins is one of the steps that makes today's plane service more comfortable and results in operating economies. A strong draft of warm or cool air, depending on the season, is forced into the cabin by Torrington fan blades.

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Air Conditioning Service Man Should Sell Idea of 'Preventive Maintenance'

Goddard Stresses Operational Check-Ups in RSES Talk

CLEVELAND—"Less than 10% of the users of air conditioning in large cities have preventive maintenance contracts, but large users like chains have it because their cost figures prove its desirability," declared M. B. Goddard of Carrier Corp., who spoke at an educational session of the recent annual convention of the Refrigeration Service Engineers Society here.

"And preventive maintenance by outside service men is usually preferred by the big operators to keep their own operating engineers on their toes," he added.

"One store manager, however, had kept his operating engineer so busy moving fixtures, cases, etc. about in the store that the engineer had no time to inspect the air conditioning plant. An outside service man working on a preventive maintenance contract found that he had to clean the spray nozzles of the evaporative condenser. This service man's bill opened the eyes of the store manager."

The most common form of preventive maintenance, he explained, is probably that of having your car greased regularly. This avoids breakdowns and results in economy. The average auto owner is fully aware of this, partly because the automotive industry has stressed the importance of servicing.

Reduces Rush Calls

"Air conditioning, however, is remote to the average owner, and so the service engineer should get out and sell the idea of preventive maintenance to owners of air conditioning equipment," suggested Mr. Goddard.

Preventive maintenance will smooth out the service shop's operations for the year. It will reduce rush calls on breakdowns during the summer and provide work during the winter months, he said.

The most common form of preventive maintenance contract, according to Mr. Goddard, has three sections: spring startup, fall shutdown, and periodic inspection during the operating season.

These contracts are probably just as important for commercial refrigeration installations as for air conditioning, but for commercial jobs the service man would be concerned only

with periodic inspections made on a year-around basis, he said.

"Generally, if periodic inspection shows the need for a major repair job, the service man gets the okay of the owner before he proceeds to start on the job. And this will be an extra charge, over and above the regular contract charge for preventive maintenance."

After a periodic inspection has been made, a written report should be turned in to both the owner of the equipment and the office of the servicing firm. By using a printed check list this written report can be prepared fairly simply, explained Mr. Goddard. These check lists are also useful in estimating the time that would be required to inspect a job and thus arriving at a contract price.

'Impractical, But Important'

"Although it would probably be impractical to show pressure-temperature records on inspection reports of air conditioning systems, they would possibly be very helpful on commercial refrigeration jobs," he said.

"It is common practice, however, on jobs having centrifugal compressors, since they usually have all the necessary gauges installed as a part of the compressor. By studying 'log sheets' of these installations, engineers can check on their performance."

"Once, for example, an engineer in factory headquarters several hundred miles away from the installation detected that something was definitely wrong with a particular centrifugal compressor. He demanded an immediate check, and inspection revealed that the blades of the compressor were fouled with rags."

An important part of inspection under a preventive maintenance contract should be keeping the installation neat and clean, emphasized Mr. Goddard.

"The owner should be proud of his refrigeration or air conditioning system and the service engineer should take the initiative in suggesting that he be permitted to clean up the system."

If the service contractor does not want to get into this end of the business, he might suggest that the owner engage the services of "fire-proofing" contractors which are to be found in every large city, said Mr. Goddard.

"Fire-proofing" contractors are essentially concerned with keeping a place neat and clean, he explained. Besides being prepared to clean and paint a condensing unit, for example, these contractors can cut holes in ductwork to permit cleaning of the entire duct system. Keeping the ducts clean will improve the efficiency of the system and is also effective in keeping objectionable odors from developing.

Dirty Cooling Coils

"Cooling coils in conditioners sometimes become almost completely stopped up with dirt, especially in restaurants," commented Mr. Goddard. "Often it's hard to see the dirt in these coils, but the cleaning contractor could take care of cleaning them. Of course, the refrigeration service engineer could perform these services himself, if he wished."

Before the service contractor undertakes to handle the cleaning job too, he should quote a price and get a contract from the owner, advises Mr. Goddard.

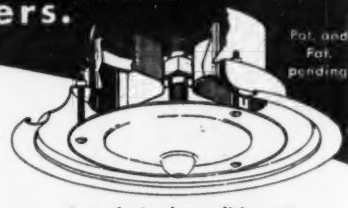
"The rate to be charged for preventive maintenance is a matter of the service operator's own business judgment, but when conditions become more competitive in the future, it might be advisable for the contractor to offer his preventive maintenance customers reduced rates on regular repair jobs," he suggested.

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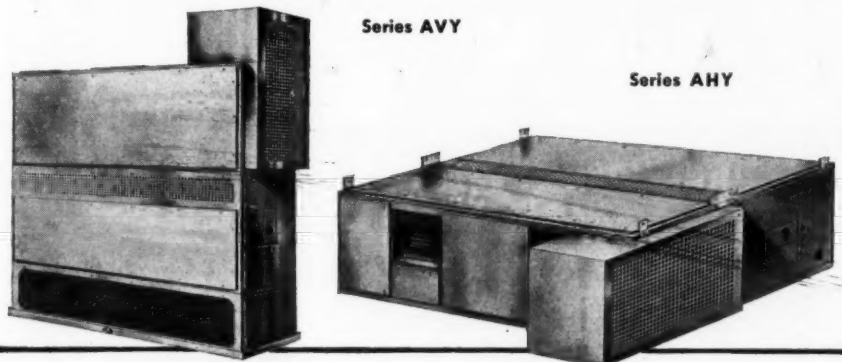
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Available in five sizes, handling air quantities ranging from 1,600 to 12,000 c.f.m., AVY and AHY models operate on both water cooling and direct expansion.

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Famous Chicago Hotel Modernizes with Worthington Air Conditioning

Patrons of the Bismarck Hotel and its adjoining Palace Theatre are looking forward to enjoying the ideal outdoor weather indoors they'll get when the two Worthington 500-ton steam turbine-driven compressors now being installed go into action to supply the necessary refrigerating effect.



Worthington Advertising Ranks at the Top

Recent Starch reports on advertising in TIME Magazine rate current Worthington Air Conditioning ads as leading all competition in attention-value and thorough readership, on the basis of results per dollar invested. This indicates that American businessmen are becoming increasingly familiar with the advantages Worthington offers.

Worthington "Integration" Offers Many Advantages

Making so many of the vital "innards" of an air conditioning or refrigeration cycle... compressors, condensers, pumps, turbines, valves, fittings, etc. . . Worthington is in an ideal position to combine them into the integrated unit that will give long, trouble-free, economical service. Your nearby Worthington Distributor will be glad to give you further details that prove there's more worth in Worthington.



All Right...
where does
the Moisture
go?

THAWZONE DATA

"It sure worked on that job," says Mr. Service Engineer. "But where does the moisture go when THAWZONE acts on it?"

"We'll try to explain," we say. "But please bear with us if our explanation sounds complicated."

Water has the chemical formula H₂O. Chemically, however, it generally behaves as if it were made up of two parts: an H⁺ (positive hydrogen ion) and an OH⁻ (negative hydroxyl ion). There are various compounds that interact with water to split it up this way. Most of them are unsuited to a refrigeration system.

THAWZONE, however, is a solution of compounds which are suitable. All they do is to "grab" on to the H⁺ with one part and the OH⁻ with another. The resulting new compounds are complex, but oil-soluble and inert. As a matter of fact, to separate these materials and identify them is almost impossible. This is another indication of their inertness and similarity to the oil normally present in refrigerating systems.

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Air
Conditioning
and
Refrigeration

At a Manufacturers-Wholesalers Get-Together



At the R.E.W.A. luncheon during the All-Industry Show for R.E.M.A. members this group took one of the tables. L. to r.: Roy Neville and H. W. Weihermayer, L. H. Gilmer Co.; Mr. and Mrs. Oscar A. Larson, Larson Supply Co., Allentown and Reading, Pa.; Mr. and Mrs. Harry Jaeger, Jaeger's Sales & Supply, Trenton, N. J.



Canadians dominate this group. J. D. Ross and Alec Baillie, Railway Engineering & Supply Co., Montreal; F. A. M. Dawson, Refrigeration Supplies Co., Ltd., London, Canada; L. C. Batho, Manning Equipment Co., Halifax; A. E. Doan, Railway & Engineering Supplies, Toronto; Nelson Cooper, Electrochemicals department, du Pont Co.

R.E.W.A. Outlines Program for Coming Year; Regional Groups Widen Their Activities

CLEVELAND — Refrigeration Equipment Wholesalers Association, in addition to the aggressive program planned to improve the position of the wholesaler and his customer as outlined in the report in the Nov. 4 issue of the NEWS, discussed other problems and plans during their one-day business meeting held during the recent All-Industry Exposition in Cleveland.

Revealing some worry over the possibility that the parts and equipment wholesaler's inventories might get out of hand in a relatively short period of time, officers of R.E.W.A. urged that members cooperate more fully in providing the association with sales and inventory reports, so that an overall picture can be obtained.

The Trade Relations Committee, headed by Lem V. Branson, reported that contacts had been made with various local contractor groups and also with the National Association of Refrigeration Contractors, and that the committee had recorded actions which can be solved by the mutual activities of the two groups.

A discussion of the regulations regarding the use of refrigerant cylinders turned up the following main points:

1. Wholesalers who handle refrigerants should familiarize themselves with the laws regulating the use and shipment of cylinders. Cylinders cannot be used which have not been



At the R.E.W.A. luncheon Rewa's President Ted Glou (standing, right) presented a \$2,500 check from the association to H. F. Spoehrer, president of R.E.M.A., the money to be used for the industry public relations program which is sponsored by Rema. Seated at the left is George Roche, R.E.W.A. vice president, and at the right are Theodore Sills of Sills & Co., public relations firm handling the program, and H. T. McDermott, international secretary of the Refrigeration Service Engineers Society.

tested within the last five years. The association office can provide information about the testing of cylinders.

2. Wholesalers can charge refrigerants into cylinders which they do not own only if they have approval of the owner of the cylinder, according to a strict interpretation of the regulations.

Reports of wholesaler's regional group activities revealed many interesting activities. The report by Irving Fajans for Region No. 2, the New York City metropolitan area, pointed up these activities:

Members of Region 2 have decided to stay closed on Saturdays throughout the entire year. It was tried in the summer months, and at the close of the period agreed upon, a vote was taken and the decision was made to adhere to Saturday closings throughout the year.

One main advantage of this, Mr. Fajans revealed, was in keeping out the "chiselers" who were not members of the trade, and who dropped in on Saturdays to try to "buy it wholesale."

As reported in the Nov. 4 issue of the NEWS, R.E.W.A. will press for the following program in the ensuing months:

1. A written statement of the sales policy of the individual manufacturer, which policy will hold for all parts of the country.
2. More vigorous promotion of the theme "buy from your wholesaler."
3. Net cost schedules for use by the wholesaler, and also a net resale schedule to replace the complicated discount schedules which are now often the rule.
4. Establishment at the earliest

This group has also retained an outside credit recording organization to provide an interchange of credit information monthly, and to list all accounts over 45 days old.

A permanent trade relations bureau has been established to hear all "gripes" from contractor customers and to work out solutions to trade problems.

Region No. 1 (New England) reported considerable success with its well-established program of holding two "outings" a year, to which manufacturers' representatives are invited.

Region No. 7 (Iowa, Nebraska, Minnesota, and Kansas) members hold regular meetings, at each of which a session is opened up to representatives of manufacturers for a round-table discussion of mutual problems.

Region No. 8 (the southwest) have inaugurated a credit interchange service, and have also developed an insurance protection plan on refrigerants.

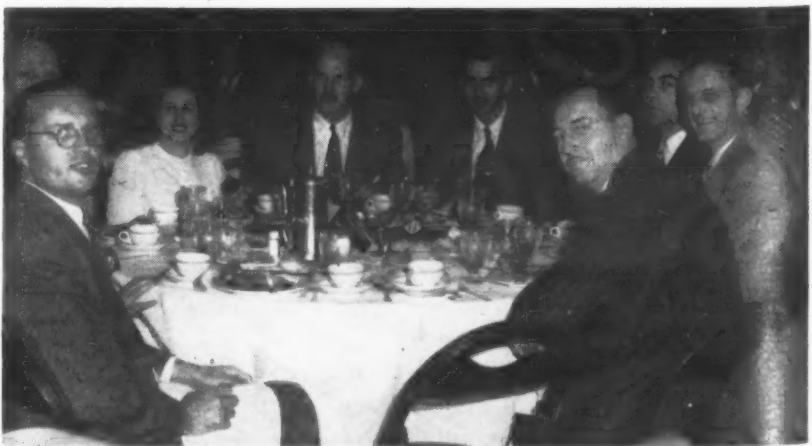
possible time of the date for the next All-Industry Show, so that R.E.W.A. can dovetail its plans into those for the Show.

5. Reduction of warranties on products to 90 days.

6. Easing of regulations on refrigerant cylinder recording.

7. New definitions to distinguish the "true" manufacturer from the assembler, and a schedule of discounts which will permit the wholesaler to sell some of these firms.

8. Simplified listing of parts by makers of condensing units.



L. to r. around this table are Ted McLaughlin, Victor Sales & Supply, Philadelphia; R. C. Robertson, Superior Valve & Fittings Co.; Mrs. Ted Yecies (wife of Ted Yecies, Tesco Distributors, Newark, who got cut out of the picture); Kurt W. Rose, Superior Valve & Fittings Co.; Jack Tupper, Peerless Pacific Co., Portland, Ore.; Lem Branson, California Refrigerator Co., San Francisco; W. J. Hieber, Refrigerative Supply, Inc., Portland, Ore.; F. M. Crooks, Refrigerative Supply, Seattle, Wash.



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Snap decisions can be costly, so get all the facts before you decide to build your own blowers. Remember, regardless of claims, only those who build complete blowers know actual costs.

WHY BUILD YOUR OWN BLOWERS?



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Concentrate on Profitable Production. Considering high labor costs, it is easy to see the advantage of utilizing the labor you employ to increase production of your own major product . . . instead of tying up labor on the assembly of blowers.

Do a Bigger Volume with Less Inventory. When you buy complete blower assemblies you can turn over your investment oftener, operate with less storage space and with less loss through waste and damage of materials.

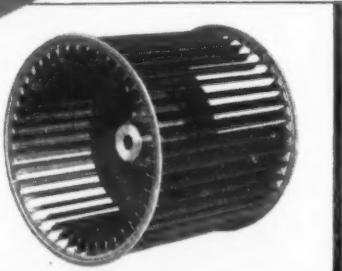
Know and Control Your Costs. In figuring comparative costs, be sure to include all cost factors—such as plant overhead, departmental overhead, proportionate sales and advertising expense, depreciation of stock and equipment, maintenance of tools and machinery, correspondence with numerous sources, bookkeeping, and other hidden costs which properly belong on the cost sheets used in pricing the blower that you finally make.

When you buy the COMPLETE ASSEMBLY from LAU, you know in advance what your dollar and cent costs are and can figure them accurately into the total cost of your finished installation.

Profit by Mass Production Economies. LAU has spent, and continues to spend, thousands of dollars in engineering and equipment to produce standardized parts of better quality. Because of mass production facilities and economies, LAU precision-built assemblies offer more definite assurance of mechanical performance and air delivery efficiency.

Let us have a trained representative show you the additional economies in buying complete blower assemblies.

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REFRIGERATION EQUIPMENT
WRITE FOR CATALOG
Lynch
MANUFACTURING CORPORATION
DEFIANCE, OHIO, U. S. A.

On Hand at the All-Industry Show



Seated before the Schnacke booth where the firm's line of 5 to 50 hp. condensing units were shown are: (left to right) L. C. Roney of the L. C. Roney Co., Inglewood, Calif.; and F. C. Schnacke, president and sales manager of Schnacke, Inc.



Representing American Refrigerator & Machine Co. at its exhibit of home freezers and beverage coolers were Maxine Mayer and Robert L. Honey, of the sales department; with them is A. W. Monroe, of the Dole Refrigerating Co.

Variety of Cooling, Air Conditioning Equipment Seen by Show Visitors

Visitors 'Got a Drink' at Oasis Water Cooler Booth

Exposition visitors were invited to Booth 201 to get a drink of cooled water and to take a look at the latest air-cooled Oasis electric drinking water coolers. The many who did saw:

1. Model OP-10: the pressure bubbler size 10, described as the new, self-contained cooler "which is breaking all sales records."
2. Model OP-20B: the pressure bubbler size 20, the new two-bubbler, industrial and restaurant-type self-contained cooler.
3. Model OB-4: the new bottle cooler.

Also shown were Models K-10 and K-4-B, powered by Kelvinator's new Polarsphere hermetically sealed condensing unit. These two models are distributed exclusively through the Nash-Kelvinator Sales Corp. and affiliated distributors.

Master Locker Sales Booth Features Giant Size Drawer

A full line of individual lockers in varying types and sizes was on display at the booth of the Master Locker Sales Co., and considerable interest was shown in the "giant" size drawer which measures 20 in. high x 24 in. wide x 30 in. deep, according to Bryce H. Vollmar, vice president of the company. This new large locker is said to provide about 25% more storage space than the ordinary size drawer.

Feature of the Master line which the company stressed was the fact that Master's individual lockers permit stacking almost any combination of drawer and door types in various sizes in a single tier according to requirements of the locker plant.

Besides the lockers, photographs of Master quick freeze cabinets and freezer trays were also on display.

'2-in-1' Dehydrator for Small Systems Displayed by Sporlan

Designed for small refrigeration systems, a new dehydrator which combines a filter and a drier in a single compact unit for small refrigeration systems was introduced by Sporlan Valve Co. of St. Louis at its booth in the All-Industry Exposition. Drying and filtering element con-

sists of a molded block measuring 2 in. in diameter and 2 3/4 in. long which is cemented into a brazed steel shell. The block is claimed to be rugged and capable of withstanding normal handling and abuse. It is said to filter out all particles larger than 7 to 9 microns.

Construction of the dehydrator prevents any appreciable pressure drop in the refrigerant flow, Sporlan claims. Moisture-proof plastic caps seal the brass inlet and outlet connections, which are 3/8 in. S.A.E. flare with a long taper. Reducing flare nuts may be used for connections to 1/4 in. tubing.

Rated at 1/2 ton capacity, the dehydrator should be installed in the liquid line as close to the expansion valve as possible when employed on "Freon-12" and methyl chloride systems. With sulphur dioxide, the company recommends placing the dehydrator in the suction line.

Cornelius Has Beer Dispensers, Commercial Line Equipment

Many visitors who stopped at The Cornelius Co. booth saw the firm's new line of commercial refrigerator hardware and its line of draft beer dispensing equipment.

Representatives explained that the hardware line consists of newly designed hinges and locks in all sizes and types for commercial refrigerators, low temperature units, coolers, reach-ins, vegetable and meat cases, beverage coolers, and cold storage doors.

A complete range of materials, such as pressure cast metals, cast bronze, iron and steel, and forged brass, are available in a variety of finishes from cadmium to chrome plate, it was stated.

Nevinger Air Conditioners Vary from 1/2 to 5-ton Models

Four models of self-contained air conditioners, ranging from a 1/2 ton window unit to a 5 ton "high-boy" were on display in the booth of the Nevinger Mfg. Co., Inc., of Greenville, Ill.

The 1/2-ton window model employing a hermetically sealed unit is constructed in an inverted L-shape and designed to hang on the window sill rather than fit into it. The vertical section of the "L" remains inside the room and is fitted with an air outlet

at the top and an air intake on one side. It is equipped with a fiberglass filter, and the conditioner fan may be operated independently of the refrigeration unit to provide air circulation only if desired.

Offices and other applications where space is limited but comfort cooling requirements are high may provide the principal market for the 2-ton Nevinger "low-boy," which employs a 4-cylinder reciprocating type compressor and a water-cooled condenser. It is thermostatically controlled. Accessibility for servicing is a feature claimed for this model, the front panel being easily removed by unscrewing four bolts. Control knobs are concealed beneath a flat panel on the front to prevent tampering.

Hermetically sealed units are employed in the 3/4-ton floor type air-cooled models, which are also of modern styling. The 5-ton "high-boy" conditioner is of standard design and powered by a 6-cylinder compressor running at motor speed.

Refrigeration Appliances, Inc. Streamlines Its Unit Coolers

"Streamlined" models of numerous Krack low-side units were featured in the display of Refrigeration Appliances, Inc., of Chicago. Rounded corners on some of the units are the obvious changes among those incorporated to improve appearance of the low sides and to facilitate production.

On display were the Freez-E-Fex low temperature unit with automatic electric defrosting, the Strat-E-Fex ceiling type unit cooler, the Blo-E-Fex floor type unit cooler, the Fan-E-Fex general purpose unit cooler, Zer-E-Fex general purpose cooler

Discussing American Injector's Line of Accessories



John Trix (extreme left) and Ed Kellie (extreme right), both of American Injector, are shown discussing the Show with A. Kehe from Imperial Refrigeration Service, Buffalo, N. Y. Displayed at the American Injector booth was its line of filters and oil separators.

with water defrost, Flo-E-Fex wall mounted unit cooler with pyramid deflector for use in low-ceiling walk-ins and reach-ins, and the Draft-E-Fex down draft unit cooler intended for bottle coolers and other applications.

'Air-ite' Direct-Driven Beer Pump Makes Bow at Show

Carrying a five-year guarantee, a new "Air-ite" direct-driven balanced-pressure beer pump was introduced at the All-Industry Exposition by the Ramsey-Bennett Co. of Cleveland.

Claimed to provide clean and oil-

free air, the pump is controlled by a standard pressure switch which cuts in at 45 lbs. and cuts out at 65 lbs. pressure, going from low to high pressure in 50 seconds, it is said.

The compressor is of die-cast aluminum construction with but three moving parts. It is powered by a heavy duty, dual voltage 1/2-hp. capacitor type motor. The motor-compressor-control assembly is mounted above a welded steel tank which has been tested to working pressures of 150 lbs., the company claims. The tank measures 24 in. long x 9 in. diameter. The tank itself rests on stamped steel feet.

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Many Items Introduced at All-Industry Show Broaden Market For Refrigeration Dealers

New G-E Condensing Units In 1/8 to 1 1/2 Hp.

(Material on this and some of the following pages describes some of the products exhibited at the recent All-Industry Refrigeration Exposition.)

Scheduled to go into production for the trade during the first quarter of 1947—if the material situation permits—a new line of "Freon-12" open type condensing units was publicly introduced at the All-Industry Exposition by General Electric Co.'s Air Conditioning Department.

At present the contemplated Type CW line ranges from 1/8 to 1 1/2 hp. in both air and water-cooled models. The company expects to extend the line upwards at some future date. There are one-cylinder, two-cylinder, and four-cylinder V-type units in the line with operating speeds variable from 600 to 1,725 r.p.m., depending on pulley ratios.

Wide interchangeability of such major parts as pistons, valves, and rods between all of the models in the line is one of the features stressed by G-E for these new Type CW condensing units.

The company also emphasizes the force-feed lubrication system employed in all models. Force feed is provided by an eccentric on the compressor shaft which operates a single blade rotary oil pump. An oil pressure regulator at the end of the shaft fed by the pump maintains a constant oil pressure of 4 p.s.i. throughout the system regardless of wear, tempera-

ture changes, or variations in viscosity of oil or speed of the unit, the company claims.

Constant oil pressure is maintained by a spring relief valve in the regulator which returns excess oil to the bottom of the crankcase when the pressure delivered by the oil pump exceeds 4 p.s.i.

Airserco Aims Booth Display At Refrigeration Service Man

Aimed largely at the refrigeration service man, the display booth of Aircraft Service Co., Pittsburgh, was filled with such items as the Airserco electric unit starter and analyzer, pocket-size thermostatic control testers, "3-weigh" holders for small refrigerant service cylinders, Carrene meters, and charging stands designed for 145-lb. refrigerant drums.

The charging stands, which Aircraft Service introduced for the first time at the Exposition, are portable and formed from 1/2 in. solid bar steel. They are available in three different colors: aluminum for "Freon," red for methyl chloride, and black for sulphur dioxide.

New Water Cooler, Carbonator Is Introduced by Temprite

Models of its new self-contained water cooler and the stainless steel instantaneous carbonators were introduced by Temprite Products Co. of Detroit at the All-Industry Exposition.

Bubbler of the new water cooler is so designed as to prevent the lips of the user from touching the nozzle, according to Temprite. A 1/4 hp. "Freon-12" unit powers the water cooler, which has a capacity of 16.5 gals. of water at 50° F. with entering water at 70° F. in an ambient of 70° F., says Temprite.

Constructed of non-corrosive materials, a pre-cooler is combined with the waste water drain to improve the capacity of the unit. Cooler and storage tank is constructed of hydrogen-welded stainless steel and is fitted with a bottom drain connection which can also be used for a remote fountain attachment. Copper refrigeration coils are bonded by means of an alloy dip to the outside of the stainless steel tank. The storage tank is so designed as to prevent damage in the event of accidental freeze-up, Temprite claims.

Temprite's new instantaneous type carbonators are available as carbonators or as combination water coolers and carbonators. As a combination this assembly could supply cold sweet water as well as carbonated water to a fountain or bar, points out Temprite.

Made of stainless steel, the carbonators are equipped with an electric-driven water supply booster pump, making their operation independent of water pressure, it is claimed. Temprite also states that using cooled water permits more than four volumes of carbonation, if desired.

New 1-Gal. Beverage Cooler, Horizontal Compressor

Among the five functioning displays "getting the eye" in the Coolstream Corp. booth was the new 1-gal., all-stainless-steel bottle cooler built along the same basic design as Coolstream's standard coolers.

L. L. Berken, Coolstream president, said the cooler is featured by a new development in miniature compressors. Powered by a 1/20-hp. unit, the cooler is regarded as having "unlimited applications," including juice and cocktail cooling and the like.

In addition to the 1-gal. cooler, visitors saw a 5-gal. bottle cooler, two 10-gal. coolers, and the new Controltemp condensing unit (mounted on a frozen food cabinet).

The condensing unit, which is described as "close coupled with an air-cooled condenser," has a two-stage, horizontal, reciprocating, belt-driven type compressor with aluminum pistons, and is intended for use with "Freon-12" only.

"Innovations incorporated in this unit make possible a widely expanded number of new applications by the air conditioning and refrigeration industries," Coolstream said.

New sanitary features to prevent contact of hands with the source of water also were emphasized.

Some Products Pocket-Size, Others Cool Barrels



Harriet M. Werle, well-known to radio listeners in the Pittsburgh area for her programs over stations there, holds the "pocket-size" thermostatic control tester which was a featured item in the Aircraft Service Co. booth. Other products shown included the electric unit starter and analyzer, and "3-weigh" holder for small refrigerant service cylinders. At left are Kurt W. Rose of Superior Valve & Fittings Co., and Emmett Williams of Aircraft Service.



Len Wright, Jr. (left) and Arley Baker (right) of Alco Valve Co. give a "one-two" demonstration to Johnny Graves, Graves Refrigeration Co., Miami, Fla., on the new Alco electronic liquid level controller.



Temprite's new self-contained water cooler and its instantaneous carbonator drew crowds to its booth and kept such Temprite executives as Owen Nelson (second from right, seated) and Jim Goodwin (far right) busy explaining features of the new equipment.



A 2 1/2 barrel draft beer cooler, an 8 foot blower-type dry beverage cooler, and a 20 cu. ft. frozen food cabinet were featured in the Ideal Cooler Corp. booth. In the picture (l. to r.) are Louis Weiss and Miss L. Greenberg of Ideal, and Mrs. Emily Magnus, Shaw Hill Refrigeration Co., St. Louis.

Jordon wishes to extend its thanks and appreciation to the host of dealers and distributors who extended such a warm reception to our exhibit at the Cleveland All-Industry Exposition, acclaiming it the most popular, the most modern and the most all-inclusive.

We are deeply sorry that we could not fully demonstrate America's most modern line of frozen food display equipment, home and farm freezers and other new models of reach-in and display refrigerators to each and every one in attendance. Because of the exceptionally large number of visitors showing such great interest in Jordon equipment, that task was physically impossible.

To those who placed orders for our equipment, both old customers and new friends made at the Exposition, we wish to take this opportunity to thank you and assure you that everything possible will be done to expedite delivery of all items you have ordered from us.

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Aids to Service Men, New Compressors, Valves, Coolers Introduced at Show

Improvements for Field Mark Lynch Display

A big display of condensing units characterized by several improvements chiefly designed to aid the refrigeration service man highlighted the booth of Lynch Mfg. Co. at the Exposition. Models on display ranged from 1/4 to 5 hp.

All bolts used in assembly of these condensing units are now being cadmium plated to keep them from rusting and becoming hard to remove, and in addition, Lynch is now welding the compressor and motor bolt units to the condensing unit base. This should greatly facilitate removal and replacement problems, Lynch believes.

On its air-cooled units, Lynch now silver solders connections in tubing to and from the condenser to prevent any possible damage in shipment and resultant leaks, the company announced. On water-cooled condensing units, line connection to and from the receiver have soft solder joints which are intended to serve as fusible plugs.

Some models of condensing units are being fitted with forged connecting rods made out of bronze bearing metal. This metal eliminates the need for special bearing surfaces on the rods, according to Lynch.

To make motor starters more accessible, Lynch has changed their location from atop the motor to brackets mounted on the condensing unit base.

Another change has been incorporated on models of 1 hp. or larger where the base of the motor is not slotted and adjustments of the belt must be made by sliding the motor in the slotted base of the condensing unit. By means of a concealed mechanism, belt tension may be adjusted merely by turning two bolts, according to Lynch.

Six Major Features In New Imperial Valves

Six major features are claimed for the "Diaseal" line of hand valves which Imperial Brass Mfg. Co. introduced at the All-Industry Show. Available for "in-line" and right angle installations, the new valves are made in either flare or solder type connections.

No springs are employed in this design, direct lift providing positive control with refrigerant flow in either direction, the company claims. There are only two moving parts, and easy "finger-tip" action is said to be provided. Internal parts of the valve lift out with the bonnet, which is claimed to aid soldering in the line.

Said to be impervious to common refrigerants, the diaphragm has stood up under more than one million openings and closings under refrigerant pressure. Refrigerant is confined to the valve chamber and does not come in contact with operating parts of the valve. A mounting bracket is an integral part of the forged brass body.

Another featured item on display at the Imperial booth was an improved model of the company's "Torpedo" dehydrator. Major changes in this silica gel dehydrator is the new micron filtering element.

Located within the outlet end of the dehydrator, the filtering element is made of phenolic-resin-impregnated cellulose, which has been polymerized to make it impervious to refrigerants. The company claims this filtering element is three times finer than the screens usually employed and is equivalent to approximately 320 mesh.

Special Kits of V-Belts For Service Engineers

A special assortment of 50 V-belts to supply the needs of the refrigeration service man highlighted the Gilmer exhibit.

Along with these belts, of most popular sizes, the company offered in a single kit: a rack on which to store the belts; a belt handimeter to measure width and length of belts in most used sizes from 3/4 to 3/8 in. in width and up to 75 in. in length; a belt "bible" listing more than 8,000 refrigerator makes and models along with belt length tables and change-over charts; a belt inventory card; and a window display card.

The belt assortment, the company says, gives excellent coverage for household and commercial refrigeration, air conditioning, etc.

New Water Coolers In Westinghouse Line

Taking the spotlight among the several models of water coolers and milk coolers displayed by Westinghouse Electric Corp. was the concern's new Model WA4D water cooler.

A deluxe model designed for use in smaller offices and stores, the pressure-type cooler has these features: the hermetically sealed refrigeration system, foot-pedal-operated bubbler, and a new, two-tone gray enameled cabinet with a one-piece, "splash-proof" china top.

Other features are listed as the large, "non-clog" drain and the "high efficiency" cooling chamber. In describing the latter, Westinghouse said its entire wall surface is refrigerated and the entire chamber insulated.

Refrigerant flow is controlled by a capillary tube. Other controls include an automatic, adjustable water-temperature control and an automatic reset thermostat.

A hand-operated glass or carafe filler is available as an accessory in addition to the bubbler. The motor is of 1/4 hp.

H. A. Klug, merchandise manager of the refrigeration specialties department, said Westinghouse expects to be in production on the model "in the very near future."

Also on display were these other water coolers: a 4-gal. bottle type and a 13-gal. pressure type. Representing the milk cooler line was a 3-can model with a 1/4-hp. drop-in type refrigeration unit.

Compressors In Brunner Open Units Indicate Design Changes

Among the several models of open-type condensing units displayed at the All-Industry Exposition by Brunner Mfg. Co. were some assembled with newly developed compressors which incorporate several changes over previous designs.

New 2-cylinder and 4-cylinder compressors have been designed by Brunner featuring the crankcase and cylinder cast integral instead of two separate castings. In addition, the interior compressor design has been changed from an eccentric type drive to a counter-balanced crankshaft drive. The new design also incorporates a sight glass as an integral part of the compressor body.

The 2-cylinder compressor is currently being used in the 1 1/2, 2, and 3 hp. air-cooled condensing units, and the 1 1/2 and 2 hp. water-cooled condensing units. The 4-cylinder compressor is employed on Brunner's 3, 5, and 7 1/2 hp. water-cooled units. All these models are adaptable for air conditioning and commercial or low temperature work and are designed for "Freon-12" or methyl chloride, the company says.

Panelectric Cuberators Pour Out Ice Cubes During Show

Ice cubes galore poured into the insulated receptacle set up between a pair of Panelectric automatic Cuberators at the Panelectric booth at the All-Industry Show.

Boasting that the press button age is here as far as ice cube making is concerned, Panelectric points out that all one has to do is turn the switch and the machine does the rest.

The automatic Cuberator is self-refilling, self-defrosting, and self-cleaning, according to company representatives.

A semi-automatic models with a button to release ice cubes to the storage drawer is also made by Panelectric.

The Cuberator is equipped with a hermetically sealed compressor using "Freon-12" as a refrigerant. Its dimensions are 36 x 22 x 25 in. The automatic model weighs 225 lbs. and the semi-automatic weighs 223 lbs.

Arcade Displays Locks, Hinges For Trade Applications

Locks, hinges, and other hardware for a wide range of cooling and air conditioning applications were on view at the Arcade Mfg. Co. exhibit at the All-Industry Show.

Included were heavy duty locks and hinges for walk-in coolers, hinges for vestibule doors, bumper bars, track door operators, door closers, and Super Freezer lock and hinges for sharp-freezing cabinets.

The bronze hardware comes in nickel and chromium finish.

'Just Looking' at the Dorsey Trailer



A beffurred blonde inspects the interior of a Dorsey Z-RO Transport refrigerated trailer which the company claims will haul up to 30,000 lbs. of frozen foods at temperatures as low as -15° F. Inside temperatures in the trailer can be regulated from -15° F. to 70° F. The company says that automatic controls keep the temperature within a 5° variation. Aluminum corrugated interior and duckboard flooring permit free air circulation around the load. Air enters from the louvered air duct above.

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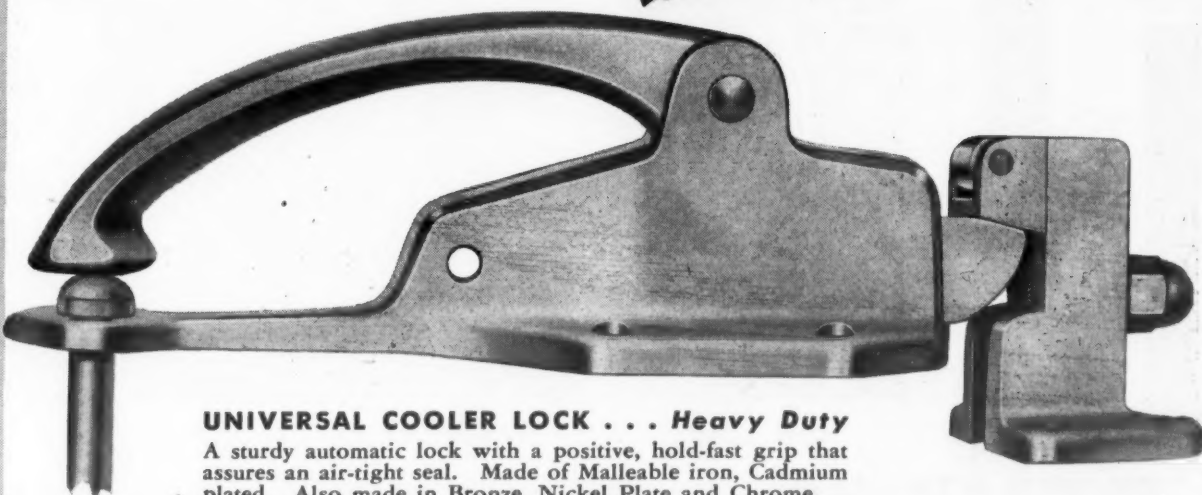
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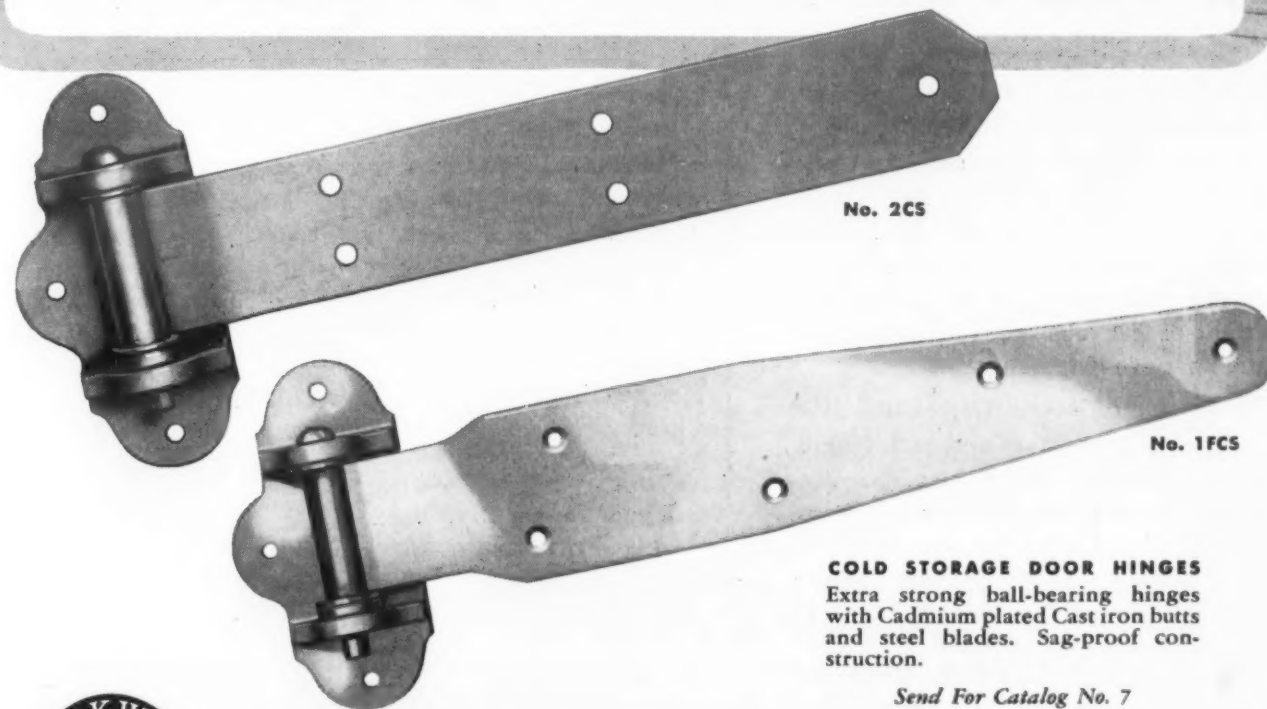
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Refrigeration Problems And Their Solution

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For Service and Installation Engineers



Manager, Refrigeration
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Division, Perfex Corp.

Stage Compression In Refrigeration (Part 4)

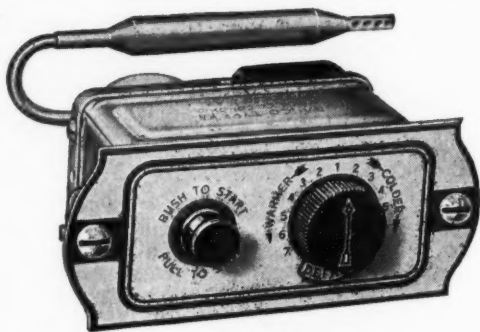
The liquid cooler in stage compression can be in any one of several different forms as its function is

merely to take some of the heat out of the liquid refrigerant. Essentially it is an auxiliary evaporator that is in multiple with the main evaporator except that its outlet, instead of feeding into the suction of the first stage compressor is fed into the interstage. This is the suction of the second stage compressor and is thus used to cool the "hot" 35° discharge gas from

the first stage compressor down to 5° before it goes into the second stage compressor.

This is very effective, for by removing this heat from the interstage the efficiency of the second stage compressor is greatly improved and danger to its valves and other parts is lessened.

REPLACE with Ranco Controls



Ranco Type KOD
commercial temperature control.

Replacing with a Ranco Refrigeration Control instead of making repairs gives the customer assurance of trouble-free operation—gives the service man more profit with less time spent on the job.

Ranco builds precision controls for all refrigeration requirements. Either exact or general replacements are available for commercial and household installations.

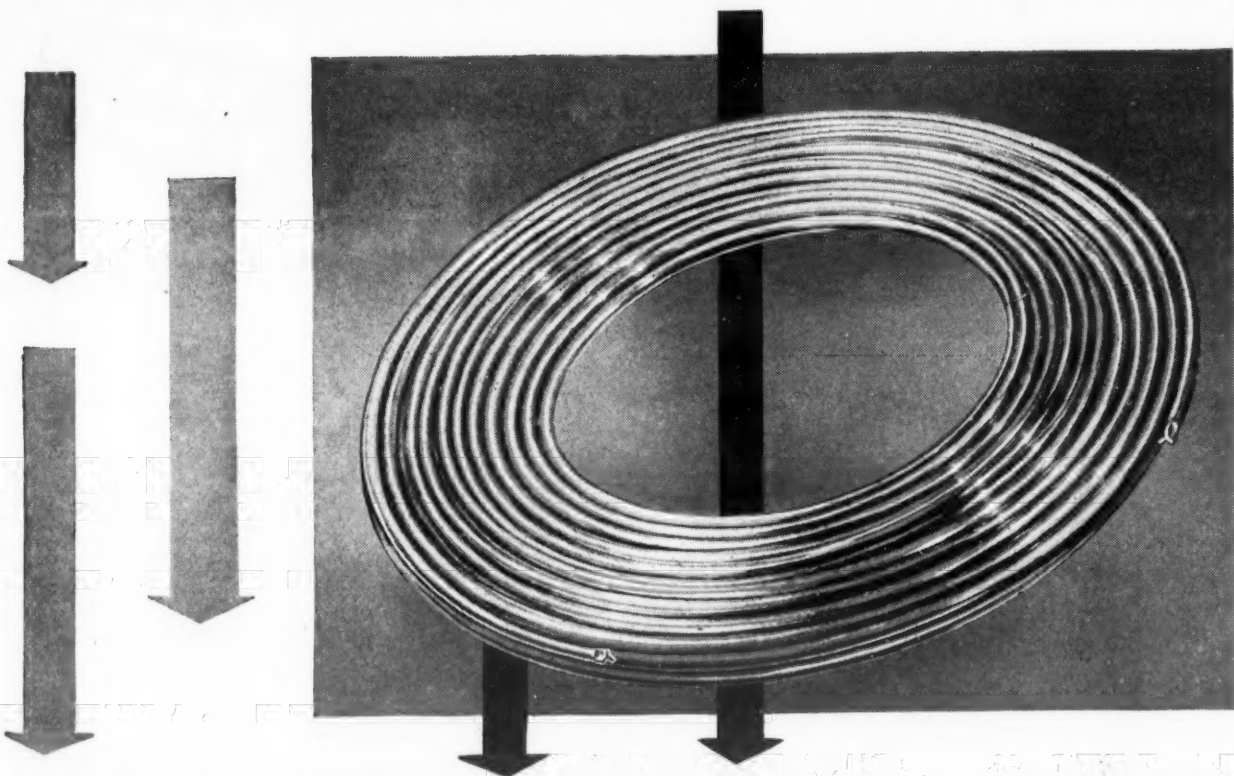
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The interior of Revere Dryseal is dehydrated during production and each length is sealed at both ends to keep moisture out. This tube is made of deoxidized copper

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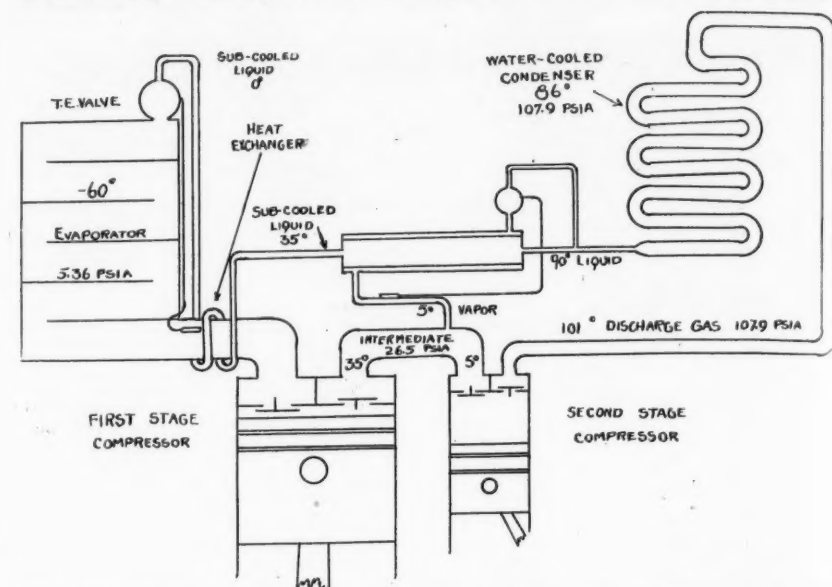
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Reducing Compressor Displacement In 'Staging



This two-stage compound compression hookup shows diagrammatically how low compression ratios may be obtained and how compressor displacements may be reduced through use of liquid sub-cooling.

THE HEAT EXCHANGER

The liquid cooler can be designed to chill the liquid colder than 35° as shown, but for purposes of illustration the further cooling from 35° to 0° is shown as being accomplished by a heat exchanger which takes advantage of the refrigerating ability left in the cold suction vapor from the -60° evaporator—refrigerating ability that might otherwise be lost.

AVOID SUPERHEATING OF THE SUCTION GAS

However, it is important in low temperature work to avoid superheating of the suction gas except just enough to assure against liquid refrigerant getting back to the compressor and damaging it. Any superheat in the suction gas reduces the capacity of the compressor, and requires greater displacement. Compressor displacements at these low suction pressures are already very high.

MECHANICAL METHODS OF COMPOUNDING

Some manufacturers use a separate compressor for each of the stages. Each of these compressors may have its own motor or two or even three compressors may be driven by one motor. Other manufacturers build special multi-stage compressors in which two or even three stages are built into one compressor, by using for example, three cylinders of a four cylinder compressor as the first stage and through special passages, discharging them into the fourth cylinder which thus becomes the second stage.

Centrifugal compressors are also built in multi-stage to permit their use with refrigerants or on applications that require high compression ratios.

BOOSTER COMPRESSORS

It has been common practice with ammonia equipment to use "Booster" compressors, which are, in effect, first stage compressors. For example,

a plant may have a number of cold storage rooms on one ammonia compressor with the suction pressure running at about 33 lbs. per square inch gauge (p.s.i.) or 48 p.s.i.a. These rooms constitute over three fourths of the total refrigerating load. It is also necessary to have a few rooms for frozen storage the coils for which are at about 0° with corresponding suction pressure of about 15 p.s.i. (30 p.s.i.a.).

These freezer rooms constitute less than one fourth of the load on the compressor but it would be necessary to operate the compressor at 15 p.s.i. in order to get the 0° coils for the freezer rooms. This would penalize the main compressor by reducing its efficiency and capacity and increasing its operating cost per ton.

This is overcome by installing a small compressor on the freezer rooms only and running it at 15 p.s.i. suction. However, instead of using a water-cooled condenser at 70° or 80° condensing, this small compressor is discharged directly into the 33 p.s.i. suction line of the main compressor, so that a low ratio of compression can be obtained (3.2 to 1).

This gives good efficiency on the low temperature load and allows the main compressor to operate on its high suction pressure with correspondingly better capacity and efficiency.

Two or three stage compression is especially useful in low temperature installations having evaporator temperatures of -35° or below, for it is on these installations that compression ratios of 10 to 1 or greater are encountered.

MULTI-STAGING BECOMING MORE POPULAR

With the increased use of low temperature for the processing and preservation of frozen foods and for various industrial processes, it is likely that multi-stage compression will come into greater prominence and more general use than heretofore, even in the smaller installations.

Judge For Your Self

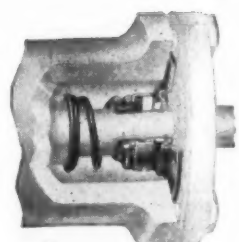
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Have Won Such
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The most satisfying way to find out why ROTARY SEALS have won such an outstanding reputation is to install them and see how well they operate. That is all we ask. We know that "if you are the judge" the verdict will be a favorable one. Our case is based on the premise that THE FEWER WORKING PARTS THERE ARE THE LESS DANGER THERE IS OF TROUBLE.



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New Equipment For All Types of Comfort and Product Cooling

(Following is additional information on items exhibited at All-Industry Show)

Large Photo Displays Picture Mayflower 2-Ton Conditioner

Redesigned condensing units and back drop photographic displays of its 2-ton ceiling and pedestal-mounted air conditioners soon to go into production were featured items shown in the booth of Mayflower Products, Inc. of Richmond, Ind., at the All-Industry Exposition.

Compressors of the 1/4 and 1/2 hp. Mayflower condensing units have been redesigned by making an integral casting of the crankcase and cylinder. Bore and other dimensions of the compressors remain unchanged, however, points out Brouse D. Rinehart, head of the firm.

The Mayflower-owned patents on the air conditioners cover a refrigerant-evaporator surrounding the fan and means to diffuse the cooled air in all directions laterally.

Four Blue Flash Boxes Stress Large Capacity, Small Space

Four models of Blue Flash commercial refrigerators emphasizing high capacity in a minimum of floor space were displayed at the Brunswick-Balke-Collender Co. booth at the All-Industry Show.

Two models are designed to cool and preserve food and vegetables at above freezing temperatures. The other two are frozen food cabinets designed to hold temperatures ranging from -15° F. to 0° F. These latter cabinets are said to hold their temperature within 3° F.

Each type cabinet comes in 15 cu. ft. and 26-cu. ft. sizes. The smaller

occupies only 5 ft. of floor space and the larger 7 1/2 ft. of floor space, according to the company. A unique load spacer permits full advantage to be taken of the large capacity of the units, the firm says.

All cabinets are hermetically sealed to protect the insulation against moisture, it is said.

Cut-Away 2-Stage Compressor Unit Features Gemco's Exhibit

General Engineering & Mfg. Co.'s booth offered Exposition visitors an opportunity to inspect Gemco's Model GSC 500 (5-ton capacity) packaged air conditioner and a cut-away of its 2-stage compressor unit, called "Gemco's latest achievement."

Another of the 2-stage air conditioners is the Model GSC 300 (3-ton capacity). Each of the models, Gemco claims, "comprises a complete air conditioning system which is contained entirely within the compact, sturdy, and attractive cabinet," and represents "the latest perfected mechanical design in complete systems."

Booth visitors were informed that Gemco's compressor is "of radial design, has four cylinders, with all forces counter-balanced at the crank shaft." It was described as constructed almost entirely of aluminum including the motor housing. Both compressor and motor "are semi-hermetically sealed into one compact, extremely lightweight unit."

Cast Aluminum Coolers, Heat Exchangers Shown

Cast aluminum water, soda fountain, beer, and beverage coolers in various sizes, along with cast aluminum heat exchangers and stainless steel self-contained cafeteria water coolers comprised the display of the Heat-X-Changer Co., Inc.

The cast aluminum coolers are constructed of concentric helix of copper, stainless steel, or Monel tubing cast into a solid block of aluminum and fitted with suitable header connections and valves. This design is claimed to provide a dry expansion low side with assurance against damage from freezing plus a holdover effect which prevents short-cycling of the condensing unit.

Cast aluminum heat exchangers have the liquid tube cast directly on the suction tube, the latter being internally finned for high efficiency in small space, it is claimed. Having no welded joints, these heat exchangers do not permit any possible by-pass of liquid refrigerant to the suction side, the company claims. These items are characterized by a minimum pressure drop, declares Heat-X-Changer Co.

Equipped with the company's water cooling units, the self-contained cafeteria coolers are available with two or four faucets and have large tray space.

'SL' and 'SP' Solenoid Valves Are Shown by Electrimatic

Featuring the exhibit of the Electrimatic division at the All-Industry Show was a display of the new SL and SP solenoid valves designed for use as liquid line stop valves. They have capacities of three and nine tons of refrigeration, using "Freon-12."

Electrimatic also paraded its new line of flare fittings, dehydrators, and strainers.

Ice Cream Freezers In 20 and 40 Qt. Capacities

Offered for inspection at the Emery Thompson Machine & Supply Co. booth at the All-Industry Show were ice cream freezers of 20 and 40 qt. capacity designed for "Freon" refrigeration systems. The company also makes hardening cabinets, soda fountains, and bobtail fountains.

Tyler Case Packed with Food Kept Constantly in Operation

A food-packed self-service frozen food display case was in operation at the Tyler Fixture Co. booth at the All-Industry Show.

Also on exhibition was the Harder-Freez low temperature farm and home locker with a net capacity of 12 cu. ft., a model P47 (47 cu. ft.) reach-in box, a 6 ft. under-bar beverage cooler, a 10 ft. conventional meat display case, and an 8 ft. self-service dairy case.

Pacific Mfg. Offers Air Conditioner in Four Shades

Offered in dark walnut, blond mahogany, plain ivory, or sanitary white finishes, a new packaged window type air conditioner was on display at the booth of the Pacific Mfg. Corp. of Cleveland.

A 1/2-hp. sealed or open type air cooled "F-12" condensing unit powers the air conditioner, rated at 5,000 B.t.u. per hour. One quart per hour dehumidification is also claimed. Cabinet measures 34 1/2 in. long, 22 1/4 in. wide, and 13 1/2 in. high, and will fit any window more than 22 1/4 in. wide. When installed, the unit extends 14 in. into the room.

The cabinet itself is lined with fibreglas insulation 1 in. thick to curb both noise and heat transmission. A 3/4 in. fibreglas partition divides the condensing unit compartment from the low side. A standard size fibreglas filter mounts in the low side ahead of the evaporator.

Limited at present by a shortage of condensing units, Pacific Mfg. hopes to turn out 50,000 units annually when full production is reached, according to H. C. Troth, president.

Trail-Aire Conditioner For Low Temperature Vans

A gleaming 28-ft. stainless steel refrigerated truck van towered out of the Fruehauf Trailer Co. booth at the All-Industry Show.

The van was equipped with the firm's new Trail-Aire conditioner designed for hauling frozen foods and ice cream at below 0° F. temperatures. This Trail-Aire unit was cased in a plexi-glas housing and fluorescent lighted for the Show. Company officials say that it will soon be available

for installation in Fruehauf refrigerated vans.

The van is also equipped with 6 in. fibreglas insulation.

133 Cu. Ft. Walk-In Dominates Engineering Associates Booth

Dominating the Engineering Associates, Inc. booth at the All-Industry Show, was the huge "Econofreeze" walk-in freezer manufactured by the firm.

"Econofreeze" is a 133 cu. ft., two compartment box, having 51 cu. ft. of freezing space and 82 cu. ft. of storage space. The unit is laid out in panels assembled with waterproof glues, heavily insulated and sheathed with waterproof plywood, the company says.

It is designed to provide farms and rural homes with large storage facilities for frozen products as well as ample space for hanging meat or cooling fruits and other produce.

U. S. Airco Shows Packaged Units, Direct Expansion Coil

Several of its packaged units and its direct expansion coil were exhibited at the All-Industry Show by the U. S. Air Conditioning Corp. of Minneapolis.

Visitors to the booth saw models of the company's refrigerated Koolaire, a completely packaged refrigeration unit available in 3 to 40 ton capacities; its evaporative condenser; its suspended type low-temperature cooling unit for commercial and industrial applications; its air conditioner; a combination unit for heating and humidifying in winter and cooling and dehumidifying in summer; and the direct expansion coil which is a component of many usAIRco units.

Jarrow Checks Reaction to New Refrigerant Line Clamp

Displaying a wide variety of rubber door gaskets for commercial and household refrigerators, Jarrow Products also found the All-Industry Exposition an excellent means of determining how many service and installation men might be interested in a new type rubberized clamp for refrigerant lines, which the company has been considering for future production.

Coated with neoprene, the clamp would eliminate vibration, provide a positive grip, and be rust-proof and oil-proof, Jarrow believes. Clamps exhibited at the Jarrow booth would handle pipe sizes from 1/4 in. o.d. to about 2 in. o.d.

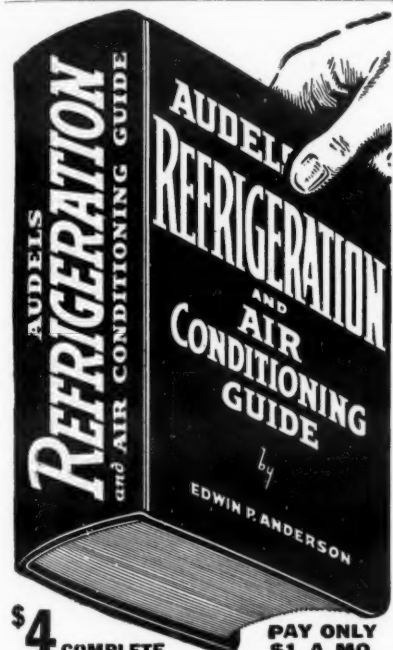
"We asked service men and parts wholesalers whether they were interested in the clamp, and about 90% said they were," declared S. L. Jarrow of the company. "We have not yet decided, however, that we will market this product."

Jarrow's improved Type 700 replacement door gasket was also on display. During the war this gasket was made entirely of sponge rubber, but it now has a mechanical rubber "skin" over the sponge rubber cushion.

Kason Demonstrates New Super-Freezer Door Latch

On display in the Kason Hardware Corp. booth was the new K-97 super-freezer door latch. It was shown mounted on an actual door so its operation could be demonstrated clearly.

Kason's newly-engineered lift-up type latch and hinge for home and farm freezers was exhibited also.



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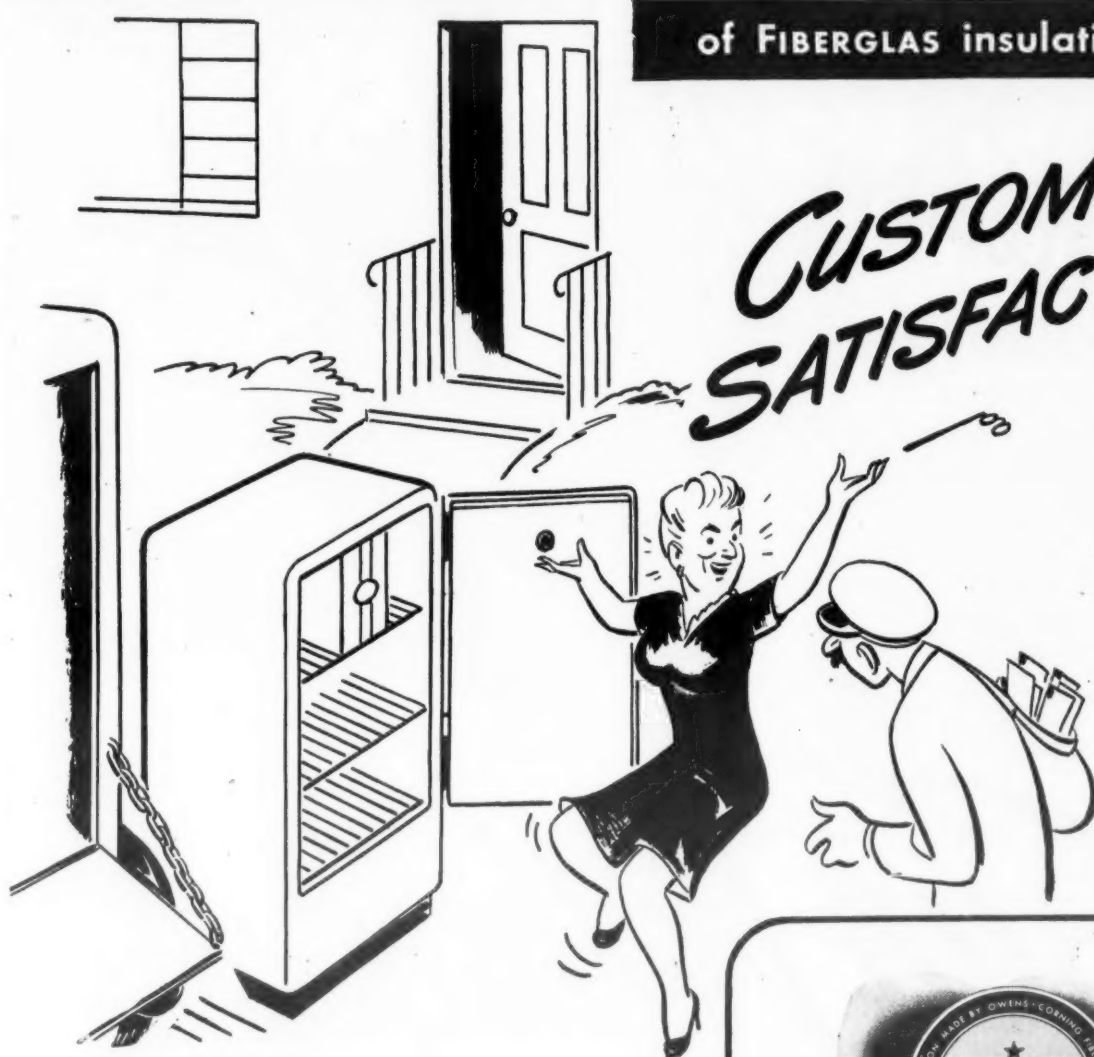
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The film interestingly pictures steps in production of the plates, explains in simple language the engineering principles involved, and cites applications. It emphasizes that "every square inch of the area of a Hubbell-Yoder plate is actual prime pickup surface," and stresses these other points: efficiency, adaptability, durability, economy, and finish and weight.

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New Hubbell-Yoder Film On Surface Freezing Available to Field

CLEVELAND—"Complete Surface Freezing," a new 24-minute slide film explaining the operational principles of Hubbell-Yoder refrigeration plates, was shown for the first time during the All-Industry Exposition by Engineering Service, Inc., international sales agency.

It was announced that the film now is available to distributors, so they in turn may show it to their men. Bookings were started during showings of the film at the Cleveland Athletic Club.

The film interestingly pictures steps in production of the plates, explains in simple language the engineering principles involved, and cites applications. It emphasizes that "every square inch of the area of a Hubbell-Yoder plate is actual prime pickup surface," and stresses these other points: efficiency, adaptability, durability, economy, and finish and weight.

Cariar Conditioner Corp. Forms with \$400,000 Stock

ST. LOUIS—The Cariar Conditioner Corp., 4200 Maryland Ave., has been incorporated by G. Elmo Holke, Clyde G. Daly, and Flora Daly, with \$400,000 authorized capital stock, to "manufacture or cause to be manufactured by licensees install or cause to be installed through agents, heating, ventilating, and air conditioning apparatus."

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RATES for "Positions Wanted" \$2.50 per insertion. Limit 50 words.
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POSITIONS WANTED

REFRIGERATION SERVICEMAN, former marine engineer, good mechanic and salesman would like to work as helper a short time to get the feel of things again before going as first class mechanic. Will work any place. M. LUSSIER, 323 East 21st St., New York, N. Y.

CAPABLE REFRIGERATION engineer of 14 years experience and outstanding record will be available upon reasonable notice to present employer. Thoroughly versed in research, design, and application problems. Currently located in Southwestern United States and prefers this general area. BOX 2109, Air Conditioning & Refrigeration News.

SERVICEMAN AGE 32 with 10 years factory and field experience, desires permanent position with a progressive organization, preferably a manufacturer. Thoroughly familiar with refrigeration business, also had some experience with steam, water pumps, fuel pumps, pneumatic controls, etc. BOX 2119, Air Conditioning & Refrigeration News.

SERVICE MANAGER age 32, 16 years in refrigeration industry, commercial and domestic, 2 years electrical engineering, presently employed as service manager for well-known make commercial and air conditioning equipment. Desire employment in Southern states, preferably Kentucky, southern Indiana, or Tennessee. BOX 2121, Air Conditioning & Refrigeration News.

DESIGN ENGINEER 33, married. Background covers design, sample building, experimentation, and production of small commercial and domestic refrigerators. Nine years experience. Specific abilities include appearance design and cabinet

structure. Capable and experienced in holding supervisory positions. Can furnish excellent references. BOX 2123, Air Conditioning & Refrigeration News.

POSITIONS AVAILABLE

WANTED: EXPERIENCED erection and service mechanic capable of taking full charge of installations and service, handling about 15 men. Must know Ammonia and "Freon." Good steady, well paying, job for right man. Apply by letter giving experience, education, etc. RICHARDSON & RICHARDSON, INC., 88-90 Park Ave., Nutley 10, N. J.

WANTED PRODUCTION engineer superintendent for producing coolers and cases, must understand wood and metal construction, make drawings, train men, be experienced in all plant operations, have successful record, old firm centrally located. Give qualifications, etc. BOX 2086, Air Conditioning & Refrigeration News.

WANTED REFRIGERATION engineers. Excellent opportunity for men with experience in the design of hermetic and open type condensing units. Also need test and service engineers. Write giving full particulars on experience and education. Location—Ohio. BOX 2105, Air Conditioning & Refrigeration News.

SALESMAN FOR two excellent specialty items. Must be familiar with manufacturers, jobbers, and commercial distributors. Chicago and States west. Inquiries awaiting right man. Can handle non-conflicting lines. Excellent commission rate. Prompt deliveries. Immediate action necessary. Give full particulars including present lines handled to BOX 2124, Air Conditioning & Refrigeration News.

EQUIPMENT WANTED

WISCONSIN DISTRIBUTOR would like glass top frozen food cabinets, also ice cream cabinets. BOX 2125, Air Conditioning & Refrigeration News.

WANTED—NEW or used pressure type oil burners, any standard brands. State price, condition, make. Address HEDGES, ELECTRIC, Hillsboro, Ohio. Phone 152.

EQUIPMENT FOR SALE

6 HOLE ICE CREAM freezer, slit doors, sealed liner and hull, 5 inches installation. Stainless steel top, immediate delivery. ACCURATE SHEET METAL CO., 837 Tilden St., Bronx, New York City.

SECTIONAL WOOD walk-in storage boxes, 4 in. fiber glass insulation, fir exterior, spruce interior, automatic locks, steel saddle step. Built to specified size. Seven day delivery, \$127 per sq. ft. f.o.b. New York. Large stock blowers, coils on hand. LEONARD BERGMAN, 150-19 Liberty Ave., Jamaica, N. Y. Jamaica 6-1733.

16 & 21 cu. ft. freezers, glass or hinged doors, stainless top. Superstructure freezer, open type \$450.00 fluorescent, menu-panel, mirror, tank-liner. Also new model double-glass-sided freezers with refrigerated dividers. Twin-stage 1/2 HP unit, less motor with each cabinet. COLDIN, 1342 Webster Ave., Bronx, N. Y.

IMMEDIATE DELIVERY—New Air Conditioning Equipment. Weathermakers complete with motor, "Freon" coil, etc. 2 ton to 25 ton. SWSI, DWDI, and Twin Centrifugal Blowers, Propeller Fans, Heating and Cooling Coils. Evaporative Condensers. Self-Contained Air Conditioning Units. CONTROLTEMP EQUIPMENT SALES CO., 236 Butler St., Brooklyn 17, N. Y.

FOR SALE: 10,000 new aluminum ice cube trays in three popular sizes. Also air-cooled and water-cooled remanufactured condensing units 1/4 up to 2 hp. Write for particulars. EDISON COOLING CORP., 310 E. 149th St., Bronx 51, N. Y.

IMMEDIATE DELIVERY: Freezers 21-cu. ft. open 20-cu. ft. glass top 20 to 44 cu. ft. All aluminum open and closed. Hinged stainless steel tops. Storage boxes wood and metal. All steel bottle coolers, reach-ins, ice cream cabinets, dairy boxes. FRIGITEMP CORP., 931 Bergen St., Brooklyn, N. Y. MA-29093.

44-CU. FT. REFRIGERATORS, immediate delivery, with blower coil—\$389.92, with ice cube maker—\$422.92. Stainless steel interior, white enamel exterior, 4 doors. Remote type, condensing unit and valves are not included. Terms S.O.B.L. 10% deposit with order. J. GEO. FISCHER & SONS, INC., Saginaw, Mich.

NEW TEMPRITE room air conditioners suitable for office or small store. Rating—2.5 tons or 32,000 B.t.u. per hour. Self-contained, water-cooled condensing unit, all operating controls, 220 V. Single or three phase operation. Price each \$775, discount for quantity. Immediate delivery. INTERSTATE APPLIANCE CO., INC., 600 Broadway, New York, Walker 5-2755.

FOR SALE—prefabricated freezer, 13 x 24 x 7 1/2 ft., outside, spun glass insulation, floor racks, lighting, two doors, complete with 7 1/2-hp. Carrier refrigeration system \$4,400. Also 3-hp. Carrier refrigeration system high and low side complete \$740. All unused. McDONALD COOPERATIVE DAIRY CO., Flint, Mich.

AIR CONDITIONING coils, 3, 5, 10, 15 ton, new, all copper, low temperature blower coils, 3 and 5 ton, all below cost, immediate delivery. NORTHLAND, 1742 Wabansia, Chicago 22, Ill.

COMPRESSOR AND PARTS rebuilding—Compressor, float valves, water valves, low pressure controls, evaporators, water cooled condensers, condensing units and many other items replaced from our large stocks, or repaired upon receipt of your defective material. Send for our catalogues listed. REFRIGERATION MAINTENANCE CORP., 321 E. Grand Ave., Chicago, Ill.

SECTIONAL WALK-IN coolers built to specifications, week delivery. Four inch insulation and heavy duty hardware. Your choice of spruce, pine, fir, \$1.20 per sq. ft.

Six inch insulation for freezers, \$1.40 per sq. ft. Cork insulation prices on request. F.O.B. Brooklyn. REFRIGERATION SPECIALTIES, INC., 721 Flushing Ave., Brooklyn 6, N. Y.

DRY BEVERAGE coolers under bar type, manufactured by General Refrigerators Corp., with heavy duty coil and blower. Stainless steel sliding covers and track. Well crated. Six foot—21 cases—\$175. Eight foot—30 cases—\$200. F.O.B. Los Angeles. Send for descriptive literature. ROYAL REFRIGERATION CO., 5071 West Pico Blvd., Los Angeles 35, Calif.

SEALED CROSLLEY TERMINALS. Installed from the outside in a few minutes without opening the compressor. Corrects leaky terminals on all Crosley "12" units. Set of three \$6.75 (Part No. 1020). Installation tool \$1.65. Immediate delivery. Money-back guarantee. SEALED UNIT PARTS CO., 3097 Third Ave., New York 56, N. Y.

FRIGIDAIRE METER-MISER Terminals. Installed from the inside. Fits compressors with bottom-mounted terminals (Part No. 1060). Set of three \$2.85. WESTINGHOUSE TERMINALS. Installed from the inside. (Part No. 1030). Set of three \$2.85. SEALED UNIT PARTS CO., 3097 Third Ave., New York 56, N. Y.

NORGE CHECK VALVES. For open-type units. (Part No. 1040). \$2.55 each. SEALED NORGE terminal packing washers. For repairing leaky terminals. Installed from the outside in a few minutes. (Part No. 1050). Three sets (9 washers) \$1.00. SEALED UNIT PARTS CO., 3097 Third Ave., New York 56, N. Y.

LARGE STOCK refrigeration supplies, blowers, and equipment. All standard brands for immediate shipment. 18, 20, 30-cu. ft. upright Custom Built freezer cabinets. Stainless steel Reach-ins, beer coolers, work benches. Ice Cream cabinets. Cold-Hold truck and freezer plates. WHOLESALE DISTRIBUTORS, 150-19 Liberty Ave., Jamaica, N. Y. Jamaica 6-1733.

FRANCHISES WANTED

PITTSBURGH DEALER and distributor desires Franchises in Allegheny County and surrounding territories for refrigerated store cabinets, air conditioning, and related lines. We maintain our own sales and service organizations. BOX 2111, Air Conditioning & Refrigeration News.

OHIO DISTRIBUTOR with large number of accounts, in forty (40) counties in and around Cincinnati, desires added lines of representation in appliances, radio, furniture, etc. Both major and traffic. BOX 2122, Air Conditioning & Refrigeration News.

FRANCHISES AVAILABLE

DEALERS AND representatives wanted to sell complete line of new modern Florist Refrigerators and allied products of nationally advertised manufacturer of this type of cabinets. No showroom necessary. Shipments start after New Years within a 30 day period. Write BOX 2106, Air Conditioning & Refrigeration News.

BUSINESS OPPORTUNITIES

COMMERCIAL REFRIGERATION CO., located in Louisville, Kentucky, has several State wide franchises; doing a substantial volume of business. Illness forces owner to sell. Business established 12 years, one owner. Large building leased in heart of fixture district; \$25,000 will handle. BOX 2118, Air Conditioning & Refrigeration News.

COMMERCIAL & DOMESTIC sales and service. Only one in city of 15,000 population. Heart of the orange empire, 50 miles east of Los Angeles, Calif. New building, plenty of room for expansion. Well established and doing excellent business. \$20,000—some terms. Reason for selling—health. BOX 2120, Air Conditioning & Refrigeration News.

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Syracuse 8, N. Y. Phone — 3-0151

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• Equalizer Tanks.
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W. P. ROGERS, Gen'l Mgr., Sun Valley, Idaho

WINTER SPORTS UNDER A "SUMMER SUN"

From Parts To Complete Units, Show Had Them All



The Roll-A-Door frozen food cabinets with such features as glass doors and a mirrored superstructure got the spotlight in the Weber Showcase & Fixture Co. booth. The two people in the background (facing the camera) in conversation with the Weber representative are Mr. and Mrs. J. L. Driskell, who came from Burley, Idaho, to see the All-Industry Show.



Mills Industries, Inc., displayed a wide range of products, including the new direct-drive condensing units, a 5-gal. counter-type ice cream freezer, a refrigerated coin-operated bottle dispenser, and the "Sono-Vision" sound motion picture machine.



A new alarm switch for home freezers got a featured place in the Cutler-Hammer exhibit. Also shown were typical custom-built controls, exact replacement controls.

All above pictures by Austin Jones, the Kerotest Co.

Expansion In Both Types of Products and Models Recorded by Many Producers

Two-Temperature Valves
Head New Mueller Items

A new two-temperature valve, side outlet strainers and dehydrators, and added sizes of its line of "Tripl-Seal" diaphragm valves were featured at the booth of Mueller Brass Co. during the All-Industry Exposition in Cleveland.

The automatic two-temperature valve is designed for use on multiple systems and is installed at the outlet of the coil (or coils) carrying the higher temperatures. It automatically maintains the pressure in the coil above the operating pressure of the condensing unit, says Mueller.

The control valve is fitted with a hand wheel valve so that the valve may be closed without affecting the adjustable pressure setting. In addition, another valve is incorporated to provide a by-pass around the automatic valve. The by-pass arrangement permits pumping out the coil or the attachment of pressure gauge while the line is under pressure. The valves are furnished in 1/2 and 3/4 in. flares.

Major claim made for the new side outlet filter and dehydrator is that the filter element or dehydrating agent may be replaced without removing the shell from the line. It is merely necessary to remove the capping plates which are bolted to the flanged end of the shell, according to Mueller Brass.

Strainer type filters are furnished with a 100-mesh bronze screen, while the filter type comes with an asbestos sack. Both the filters and dehydrators are provided with Mueller's cone screen outlet.

'Brand New' 3/4 & 1 Hp. Units
Displayed by Lehigh

First deliveries were made just 10 days before the All-Industry Show had opened on the 3/4 and 1-hp. air-cooled condensing units which the Refrigeration Division of Lehigh Mfg. Co., Inc., had on display at its booth along with other models in its line. And the company told visitors at the booth that deliveries on 1 1/2 and 2-hp. units should be underway by the end of the year.

Both the 3/4 and 1-hp. units use a 4-cylinder V-type compressor and come with 5/8 in. suction line and 3/4 in. liquid line connections for methyl chloride and "Freon-12." Motors have built-in overload protection, and standard low pressure controls are mounted on the condensing unit base.

Capacity of the 3/4-hp. unit (based on 90° F. ambient and 80° F. suction gas entering compressor) ranges from 2,200 B.t.u./hr. at -25° with either "F-12" or methyl chloride to 8,700 B.t.u./hr. at 45° evaporator temperature with "F-12."

Under the same conditions the 1-hp. units' capacity is 2,650 B.t.u./hr. at -25° F. with "Freon-12" and 11,600 B.t.u./hr. at 45° F., also with "F-12."

Control Maintains Temperature
And Defrosts Simultaneously

Initial showing of a new automatic defrost control took place during the Show in the White-Rodgers Electric Co. booth.

This control, the company said, "combines in one compact unit controls for maintaining the desired temperature and automatic defrosting of the refrigeration equipment."

Also displayed was the complete line of refrigeration controls for temperature and pressure. Visitors were told that the temperature controls are operated by hydraulic action, providing "many desirable features," and that the pressure controls offer "direct reading dials in pounds pressure and inches of vacuum, providing immediate, accurate adjustment of cut-in and cut-out pressures without the necessity of testing each time an adjustment is made."

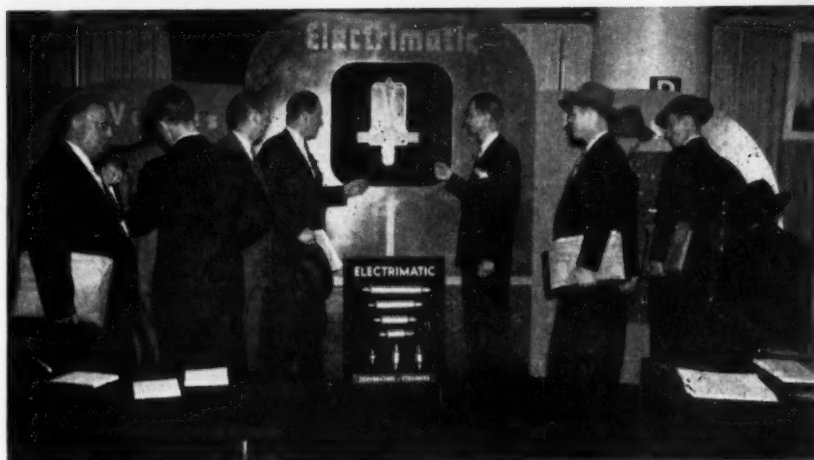
Spir-o-Freez Chute Keeps 100
Frozen Packages Displayed

Patented gravity fed chutes which keep at least 100 packages of frozen food automatically displayed feature the Spir-o-Freez double duty frozen food dispenser, designed for self-service operation.

The unusual chute arrangement is said by the manufacturer to keep surplus packages stored and fully refrigerated. The Spir-o-Freez dispenser has, in addition, 26 cu. ft. of storage space which can hold over 1,500 additional packages of food.

In the open reach-in top the merchandise is fully visible and kept at 10° F. or less.

Animated Displays Revealed Design Features



New solenoid valves for use as liquid line stop valves were featured in animated displays in the Electrimatic Division of Simoniz Co. booth. In the center of the picture by the display are C. G. Gardner of Macklanburg Supply Co., Oklahoma City, and Mel Madden of Electrimatic.

Above picture by Irving Alter, the Harry Alter Co.

Mirrored Super-Structure
Featured for Weber Cabinets

Newest feature of the "Roll-a-door" display and freezer cabinets shown by Weber Showcase & Fixture Co., Inc., of Los Angeles at the All-Industry Exposition was the mirrored super-structure which fits on the back of the company's standard cabinets.

Made in varying lengths for the several Weber cases, the super-structure provides a tilted mirror which reflects the frozen foods or ice cream stored in the cabinet. In addition, the super-structure has racks for listing the varieties of foods (and prices) carried in the cabinet.

Uniform Parts in Schnacke
Line Shown at Exhibit

Three condensing units employing individually the Models "E," "F," and "T," Schnacke compressors were exhibited at the All-Industry Show.

These units, representative of the 29-model Schnacke compressor line, demonstrated the complete interchangeability of vital parts in the compressors. The same replaceable refrigerant cooled steel sleeves, pistons, piston rings, connecting rod assemblies, bearings, seal assemblies, oil check valves, etc., are used throughout the entire line, according to the company.

Get the DRY BEVERAGE COOLER you want NOW



SIZE
39 inches high—30 inches wide—6, 8, or 10 feet long

CAPACITY (12-ounce bottles)
6-foot 17 cases
8-foot 22 cases
10-foot 28 cases

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Beautiful stainless steel and polished aluminum exterior with polished aluminum interior. Heavy duty fin-type coils, designed to give the fastest cooling and least frosting. Rugged construction, first quality materials throughout. Stainless steel lids slide away or lift out. 8-inch utility shelf. Removable dividers inside. Toe space under edge.

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Write, wire or
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franchise

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Demopolis, Alabama

Appliance Price Increases Seem Likely--

(Concluded from Page 1, Column 5)

products these increases will be only sufficient to permit the maintenance of a healthy business.

"We anticipate an improvement in supplies of materials, but also anticipate some increases in the costs of these materials," he continued. "These may, in some instances, be so great as to require somewhat higher selling prices on certain products."

"However, no established manufacturer is apt to forget that volume of sales depends upon giving customers the best of values—and in the long run free competition, and not arbitrary ceilings, will set prices."

Westinghouse

No official statement was made by officials of the Westinghouse appliance division, but that some increases in prices might be expected could be deduced from the recent statement by Gwilym A. Price, Westinghouse president, that the company had been producing some lines at substantial losses under OPA regulations.

Decontrol of appliance prices does not necessarily mean a high price, but it will give manufacturers a sound basis for long range planning, stated Gerald Hulett, vice president in charge of sales for Electromaster, Inc.

"Quite on the contrary," he explained, "the feeling among electrical manufacturers has been to hold prices down, rather than to let them go beyond the reach of the average family budget. We intend to use every economy possible to keep retail prices where they are."

Commenting on a recent meeting of the National Electrical Manufacturers Association which he attended, Mr. Hulett said that decontrol will probably change manufacturers' plans regarding new models.

"During the convention the tendency was generally away from new models," he revealed. "One prominent manufacturer of electric ranges said his company planned a 'new model' in the spring, but that the only difference would be in the hardware. He didn't contemplate any new overall design or changes in tools or dies."

"Another manufacturer had planned slightly more extensive changes for later in the year. We at Electromaster have designed a completely new stove for 1947, but hadn't plan-

ned to market it until late in the year."

These production plans may have to be scrapped now, he feels.

"The reason there was such a reluctance to new models was due to uncertainties of price decontrol and steel supplies," Mr. Hulett explained.

End of price control will probably also mean the return to prewar margins for distributors and dealers, he believes.

Here is some other price news that may be of interest to various factors in the field:

Zenith Radio Corp. boosted prices from 2 to 20% in all models in its line. The increase will average 10%.

Biggest advances were made in Zenith's highest priced radios, which, the company said, have been "underpriced and have not reflected the rise in costs of such components as cabinets."

Libbey-Owens-Ford said that for the present it will limit its increases to plate glass. Pittsburgh Plate Glass announced an increase of 5 to 10% in the price of polished plate glass.

Revere Copper & Brass, Inc., increased its price for copper products 3½ cents a pound and has made increases in brass and other alloy products proportionate to the amounts of copper, zinc, lead, and tin contained in such alloys.

Many Factors Still Block A Production Speed-Up

NEW YORK CITY—Price decontrol won't necessarily mean an immediate speedup in the production of refrigeration equipment, appliances, and other consumers durable goods.

That's the opinion of informed observers in the industry. Said one such man:

"Material shortages and the restrictions imposed by the veterans housing program will continue to retard production for sometime to come."

In a statement made Nov. 12 Civilian Production Administrator John Small declared that he thought channeling controls over building materials should be continued. If such controls are continued, they may limit by as much as 50% the pig iron, steel, and copper needed for production of consumer durable goods.

Bynum, Gazelle and They Direct Carrier's Sales Activities Spriggs Promoted--

(Concluded from Page 1, Column 4)

equipment which is direct to customers. He will also supervise contracting, field engineering, and installation activities.

Mr. Bynum has been manager of Carrier's western region direct sales activities with headquarters in Chicago since 1944, having been associated with Carrier in general sales and engineering activities since 1930. He is a graduate of both the University of Alabama and Alabama Polytechnic Institute.

Mr. Gazelle, as manager of distributor-dealer sales, will be in charge of all distributor and dealer sales which are made through 48 distributors and 3,552 dealers throughout the United States. Since 1944 he has been assistant manager of distributor-dealer sales with headquarters in Chicago. He has been with Carrier since 1937 and prior to that time had 15 years of national experience in the appliance merchandising field.

Mr. Spriggs, new assistant general sales manager, came to Carrier as assistant manager of dealer sales in October, 1944, after extensive experience in appliance merchandising and industrial sales work. From 1935 to the time he joined Carrier, Mr. Spriggs was vice president and general manager of Chapin-Owens Co., Inc., Rochester, distributor of industrial and refrigeration equipment. Previously he had been associated with the Frigidaire Division of General Motors as a sales executive.



Arthur P. Shanklin, vice president and general sales manager of Carrier Corp., goes over some plans with three sales executives recently promoted to new responsibilities. Left to right: O. W. Bynum, manager of direct sales; Mr. Shanklin; Carl U. Spriggs, assistant general sales manager, and John A. Gazelle, manager of distributor-dealer sales.

Bendix Home Appliances Declares 50-Cent Dividend, Reports on 10-Months Sales

SOUTH BEND, Ind.—A 50-cent dividend on the common stock of Bendix Home Appliances, Inc., was voted by the board of directors at a meeting in New York City. It is payable Dec. 18 to stockholders of record on Nov. 29, 1946.

Judson S. Sayre, president, reported that the company, during the 10 months ended Oct. 31, had sales of \$23,000,000, and said that the con-

tinuance of the present operations indicates an increase in this figure of approximately \$6,000,000 for November and December of this year. The company has started the manufacture of an automatic home dryer and an automatic home ironer.

The company has outstanding 1,043,000 shares of common stock out of 2,000,000 shares authorized, it was reported.

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Making those Anemostats of Alcoa Aluminum adds other benefits: Weight is saved, simplifying their installation. Life is lengthened where corrosive conditions are encountered. Appearances are enhanced, since aluminum can be finished to suit the surroundings.

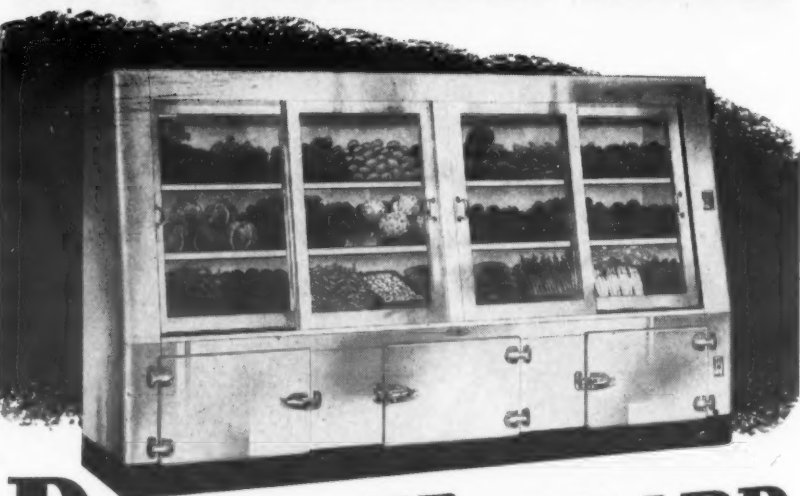
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